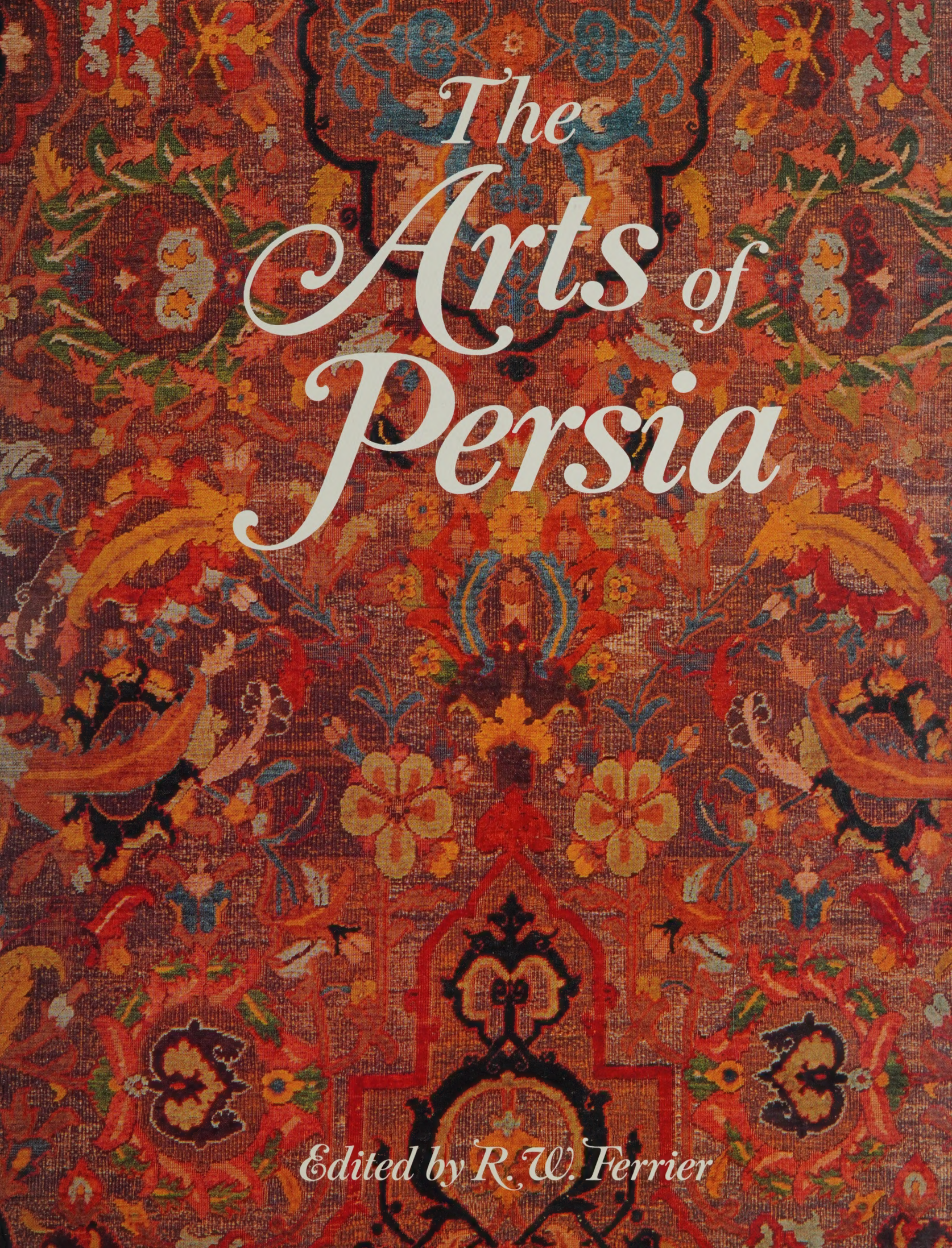

The Arts of Persia
Edited by R.W. Ferrier

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Persian art, with its detailed ornamentation, use of colour, floral decoration, balanced patterns, landscape imagery, and intricate craftsmanship includes some of the most beautiful works of art ever created. For the first time within a single volume, these various aspects of the arts of Persia are discussed in an interrelated and complementary manner.

The twenty international experts who have contributed to this volume offer a detailed analysis of their various subjects while also relating them to the political and economic issues of the time. The book begins with a cultural and historical survey through the centuries, providing a context within which to discuss the arts. It then deals with the pre-Islamic era, from 7000 BC through the pre-historic period to the court art of the Achaemenians, the buildings, statuary, and stucco of the Parthians, and the rock-carvings and silverwork of the Sasanians. It goes on to discuss the Islamic period, describing a wide range of arts, including architecture, carpets, textiles, metalwork, coins, painting, arts of the book, lacquerwork, ceramics, tilework, glass, and calligraphy.

This handsome book, which includes over 170 colour illustrations, represents a distinguished and highly readable contribution to the history of the fine and applied arts.

THE ARTS OF PERSIA


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THE ARTS OF PERSIA

Edited by R.W. Ferrier



YALE UNIVERSITY PRESS
NEW HAVEN & LONDON 1989

Where both the Islamic and Christian dates are given, the Islamic date appears first.

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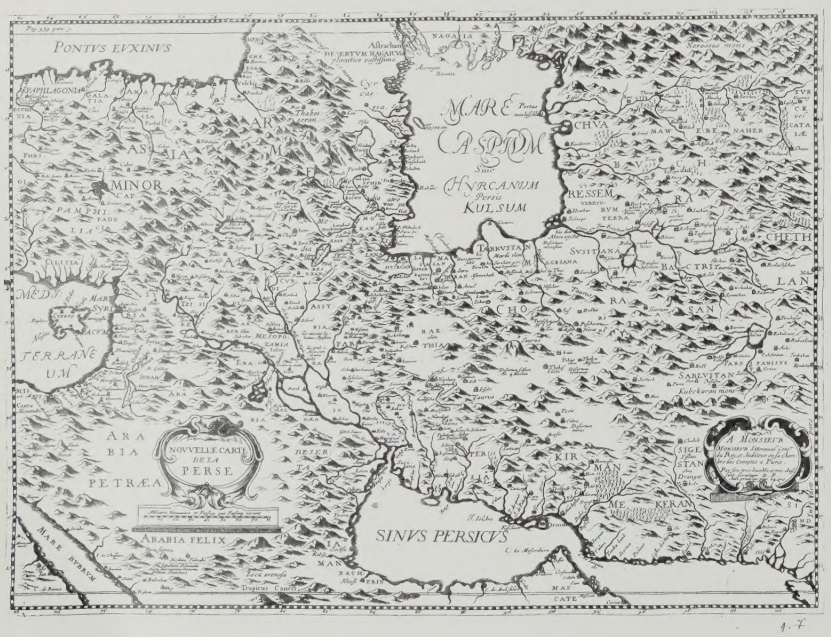
Editor's Foreword

THE EDITOR OF a book like this has the pleasant task of expressing his gratitude to the many people who have helped to bring it into existence. In the first place are the authors themselves who have not only described the characteristics of their own particular subjects and suggested appropriate illustrations but have also contributed to an enhanced appreciation of Persian art as a whole down the ages. It is fitting also to acknowledge the interest and co-operation of curators and keepers from many museums who have made a wide variety of photographs available, some of them familiar, but many which are less well known. It would be ungracious not to recognise the importance of the researches of scholars throughout the world who in the last half century especially have advanced the awareness and understanding of Persian art. Each generation of scholars is indebted to its predecessors, for its own studies are a tribute to the past, a respect for the present and a guide for the future. Yet, these contributions have to be focused for the attention and pleasure of the reader, which is the responsibility of the publisher. John Nicoll and his colleagues, especially Mary Carruthers, have accepted this challenge with skill and sensitivity. I would especially like to acknowledge the early judicious encouragement which I received from Basil Gray and Basil Robinson. Indeed, the encouragement of friends is imprinted on every page. David Morgan was indispensable over transliteration and dating which is based largely on that adapted for the Cambridge University Press, *History of Iran*. Paul Gotch and Liz Bowles were endlessly helpful over the maps.

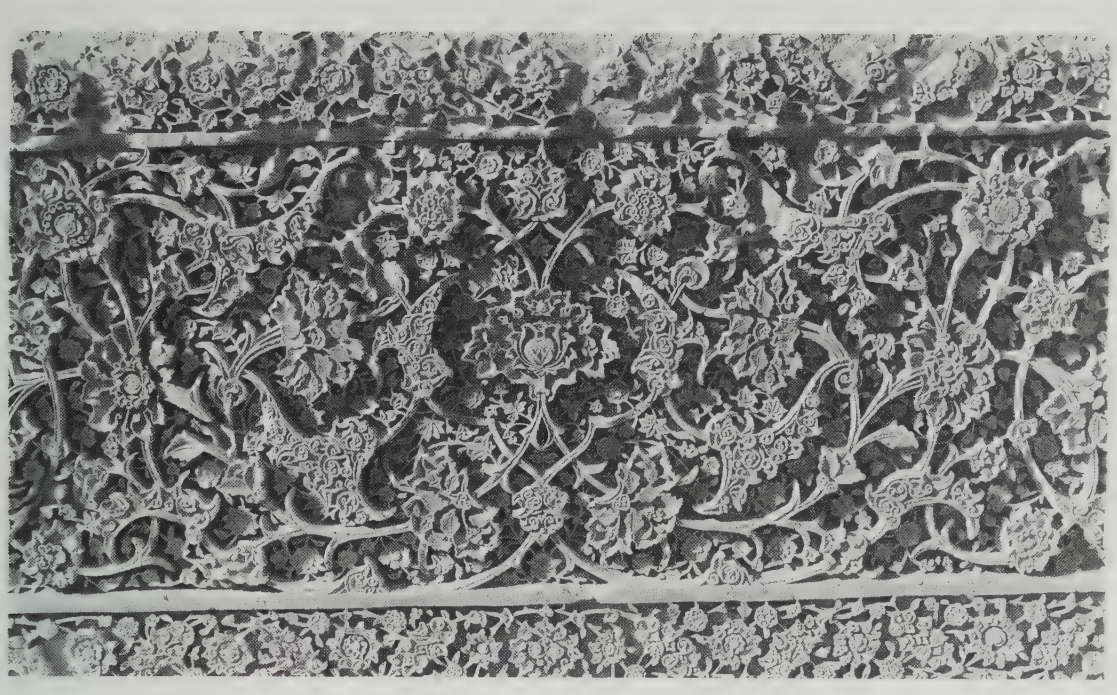
It is some time since there has been a comprehensive survey of the arts of Persia, although innumerable studies have contributed towards its understanding both in historical and aesthetic terms. Just as a 11th/17th-century map of Persia presents an unrealistic image of the country, so the modern mental map is similarly imprecise in its interpretation of the Persian past (pl. 1). Understanding changes unmistakably as the accounts of the early modern travellers amply demonstrates, for although their presentations were as authentic as they intended, much was left to the contemporary imagination as the drawing of Iṣfahān by Le Bruyn exemplifies (pl. 2). As we enjoy the great masterpieces of Persian art like, for example, the friezes of Persepolis, the silver-work of the Sasanians, the miniatures of the

1. Map of Persia, from Adam Olearius *Relation du Voyage en Moscovie, Tartarie et Perse*, Paris 1679.

2. Iṣfahān, in John Ogilby, *Asia: The first part being an accurate description of Persia and the several Provinces thereof*, London 1673.

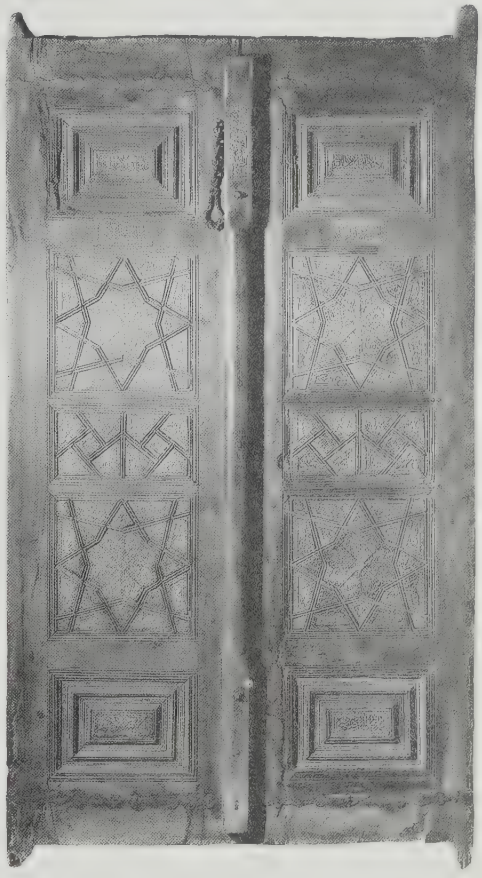






3. Tombstone of Ghiyāth al-Dīn Manṣūr, dated 843/1439–40, Herat, Madraseh-i Sulṭān Husayn.

4. Pair of carved wooden doors, inlaid with ivory, Persia, dated 348/959 by Qanbar, son of Maḥmud the Carpenter for the Mausoleum of Imāmzādeh Sulaymān, Walters Art Gallery, Baltimore.



Timurids and the carpets of the Safavids, our attention is attracted to the achievements of royal patronage, but the admirable sense of simple practical craftmanship among the people should not be forgotten. The splendidly robust but delightfully decorated 10th/16th-century pair of doors from the Walters Art Gallery in Baltimore are a reminder of this form of minor but beautifully executed useful art, wood-working (pl. 4).[3] Vernacular architecture reminds us that along with the magnificent there is the ordinary, the tiled dome of the mosque no less than the plain dome of the cistern.

In the same way whilst there are the great monumental rock carvings of Achaemenian and Sasanian times there are examples of stonecarving, such as the tombstone of Ghiyāth al-Dīn Manṣūr in the *madraseh* of Sulṭān Ḥusayn at Herat, which exhibit complex intricacy of design with the brilliance of workmanship in the subtle plasticity of stucco (pl. 3).

Although the understanding of Persian art remains tentative in many respects, for all the study that has been devoted to it, it is hoped that this volume will advance new interest and make a fresh appeal to those who desire a wider knowledge. Like all great art that of Persia displays native genius influenced by experience.

This book owes its origin and inspiration to Hossein Amirsadeghi, who conceived it as a tribute to the permanence of the Persian spirit down the ages as it is expressed in art, and who has persevered in bringing it to publication. The arts and crafts of mankind have been enriched by the Persian contribution. Numberless painters, weavers, potters, calligraphers, metalworkers, glass blowers, stone masons and others, who created objects of beauty and utility in times of peace and periods of destruction, are remembered and represented in these pages. They established the traditions and bequeathed the heritage to later generations. They came from the fertile plains of the north-west, they inhabited the central cities skirting the inland deserts, they served in the ateliers of the courts, they worked in the villages. Some achieved fame and others are anonymous. Their legacy is celebrated here in its various artistic forms.



Map of Pre-Islamic Persia



Map of Islamic Persia

Glossary

Abrīshām	Raw, eg., untwisted silk thread
Abrī	Clouded
Ārg	Citadel
Buteh	A cone-shaped motif, composed of small flowers and leaves, from a word for *shrub*
Candys	A Greek name given by Xenophon to the coat worn over the shoulders with the arms outside the sleeve
Chādur	A body enveloping veil for women
Chinār	Plane tree
Cyma	Countenance
Dīvān	Poetry collection of single author
Gul	Carpet design like the print of an elephant's foot
Hadith	Traditional saying of the Prophet
Haffī	Cloth
Hammām	Bath
Howdah	A covered litter for passengers carried by camel or elephant
Īvān	A barrel-vaulted rectangular room closed in at the back and completely open in front, usually looking onto a court.
Jāmeh	Clothes
Juftī	Pair
Khānaghā	Monastery
Lampas	A weave in which the pattern, of a supplementary warp and waft, is added to a foundation weaver. Persian lampas, especially Safavid, usually has a satin ground and a twill pattern.
Mādraseh	Collegiate Mosque
Maydān	Square
Miḥrāb	Niche, concave or flat indicating the direction of prayer
Mīna'ī	Overglaze enamel ware
Mulham	A fabric with silk warps and cotton wefts, which avoided the prohibition of silk for men's clothing
Mujallid	Binder
Muqarnas	Stalactite or honeycomb like vaulting made up of small concave forms
Naqqāsh	Painter
Naskhī	A cursive writing style
Niello	A black alloy, silver sulphide, used for inlays etc.
Nisba	Course of bricks
Pīcheh	Wimble
Pīshtāq	Monumental portal
Qalīān	Tobacco pipe smoked through water
Qalamkār	Literally: penwork. Cotton fabric patterned by block-printing, mordant- or resist-dyeing or hand painting.
Qanāt	Underground irrigation channel
Qibla	Direction of Mecca for prayers
Senmurv	Monster which is part lion, part dog with bird's wings and tail
Shalvār	Trousers
Sikka	Coin
Tālār	Open reception hall
Tepe	Hill
Thuluth	A cursive writing style
Tarāz	Raw silk
Xwarrah	'Royal glory'
Yūrt	Encampment
Ziggurat	A Mesopotamian name for a temple tower of staged towers built of rectangular blocks of mud-brick masonry

1 HISTORICAL INTRODUCTION

The cultural history of the Iranian Plateau dawns some seven to eight thousand years ago. Clay figurines have been found from this time, fashioned for sympathetic magic. These simple symbols for success in fertility and hunting are a common and widespread feature of early artistic endeavour. It is pottery appearing on the plateau in the early Neolithic Age, however, which first represents the native genius and artistry of Iranian culture. The early archaeological history of the Iranian peoples is still imperfectly known but down to the Chalcolithic period, *c.*3000 BC, the inhabitants of the plateau were settling down to an agricultural life in small communities and gradually beginning to trade with each other. Their settlements were very much determined by geographical features, high mountain ranges, vast desert plains and scant water supplies. The main areas of settlement have been found in the north-west towards Lake Urmiyyeh and the Caspian Sea, in the centre along the eastern foothills of the Zagros at Siyalk and the south-eastern parts of Fārs and off the Plateau itself in the south-west around Susa.

The first people of the plateau to have a distinct culture, language and religion were the industrious Elamites, whose empire waxed and waned in their heartland in the south-west over the centuries from about 3000 BC to their final eclipse by the Assyrians under Ashurbanipal in the middle of the 7th century BC. Their loose federation with remarkable powers of survival was often threatened by invaders from east and west such as Sumerians, Akkadians, Kassites, Hurrians, Mittanians, Cimmerians and Scythians who disputed their power, so did the Medes and Persians who arrived towards the end of the second and the beginning of the first millenium, entering the plateau from beyond the Caucasus by routes around the Caspian Sea. The Medes inhabited the northern and central areas, but the Persians penetrated further south settling in Fārs. The earliest historical mention of the Medes and Persians is in the annals for 836 of the Assyrian King Shalmaneser III, recording the tribute received from them. They appear again during the following century in different places as they had not yet finally settled. In 715 Deioces, whom tradition calls the founder of the Median empire, was deported to Syria by the Assyrians and some years later, in 681 BC, Achaemenes, the eponymous ancestor of the Achaemenians, was credited with leading the Persians against the Assyrian King, Sennacherib.

Certainly by this time both the Medes and Persians had become involved in the shifting alliances which dominated the conflicts between the Elamite, Babylonian and Assyrian empires. The Medes emerged victorious from these wars when they defeated the Assyrians in 612 BC and Nineveh was destroyed. Yet, in a reversal of fortune, Cyrus, who had become Persian king in 449 BC, challenged his wife's grandfather, the Median Astyages, and in 550 BC captured the capital of the Medes, Ecbatana (Hamadān). The Median empire too was no more. Cyrus, politically astute, showed clemency to his enemies, before enlisting them in his cause. Three years later after organising his newly won Median territories, Cyrus set out to acquire his own empire. Although he spent his remaining years, till his death in 530 BC almost continually campaigning, in 546, after defeating the Lydians, he supervised the construction of his own capital, Pasargadae, in the delightful valley of Dasht-i Murghāb in northern Fārs. By the time of his death, Cyrus had founded a great empire, which touched the boundarie of the known world. His military success and enlightened diplomacy were probably inspired by the religious beliefs of Zoroaster, which were spreading at this time. He created an administration based on humanitarian concern, efficient organisation and the encouragement of trade. Imperial art was expressed by an eclectism which reflected the wealth and influence of the empire, and was symbolised by the imagery of the majesty of monarchy. A static, but impressive art, it was to change very little over three hundred years.

Such continuity was not matched in political matters. After a successful campaign against Egypt, Cambyses, the son of Cyrus, committed suicide in curious circumstances, after a

reign of eight years. In the ensuing struggle for the throne Darius I, descended from another line of the Achaemenians, successfully suppressed all opposition. Darius was a dynamic personality, who extended the empire to its farthest limits, in the course of which he first challenged the Greeks in a contest continued by his successors. The palatial precinct of Persepolis, which he erected on the lowest slope of the Mountain of Mercy in mid-Fārs near Shīrāz displays a magnificent image of imperial grandeur with its portrayal of the subject peoples bringing their tributes. These illustrations of power were similarly revealed at his capital, erected on the ancient Elamite site of Susa, and embellished by craftsmen and materials selected from throughout the empire. In this way the traditional revelations of royal splendour of the courts of the Elamites, the Babylonians and the Assyrians were imitated by the Achaemenians. In addition communications like the Royal Roads were improved, laws were codified and enforced, taxation methodically assessed, weights and measures standardised, and the respective responsibility of the civil and the military authorities defined. The administration was centred around the monarch, the Shāhānshāh, King of Kings, who delegated his authority throughout the empire to Satraps, governors, nominated by him.

Yet however well the principles of government were conceived, the total concentration of power in the hands of an absolute monarch, both then and later, meant an inevitable dependence upon the capability, energy and integrity of the ruler and his officials. The temptations of power, the lure of luxury, the intrigues of courtiers and the jealousy of the harem afflicted the Achaemenians like other imperial dynasties. The ideals of Cyrus, so enthusiastically described by Xenophon in his *Cyropaedia*, were gradually debased in the despotism of later monarchs, and behind the impressive facade, the foundations of imperial power were crumbling. Alexander the Great in a series of arduous campaigns defeated the Persians, but before he was able to reconstitute his own system of government, he died (323 BC) and the legacy of the Achaemenians was dispersed. For some hundred years Hellenistic influences and Achaemenian practices mingled with local customs in varying degrees of autonomy under the successors of Alexander, the Seleucids. By 250 BC new centres of power were emerging in Asia Minor, where the Seleucids retained control, in Egypt where the Ptolemies came to the fore, in Bactria where a Kushan dynasty triumphed and on the Iranian plateau itself, where the Parthians, a people who had migrated from the Steppes of the north-east and had settled to the south-west of the Caspian Sea, first asserted their independence under Arsaces (238–214 BC).

The Parthians dominated the plateau and frequently beyond its boundaries for four hundred years and from the reign of Mithradates II (123–87 BC), they challenged the Romans in a notable series of encounters for the mastery of the lands of the Near East. More pragmatic and less pretentious than the Achaemenians, the Parthians were generally tolerant, but militarily formidable with their highly manoeuvrable cavalry. They ruled a lesser but more homogeneous empire than their imperial predecessors, based on a looser federal style of administration. They seemed less preoccupied with grandeur, less exclusive than the Achaemenians and their rule appeared less onerous. They encouraged trade and the great silk route from China was a major source of their wealth. They cultivated extensively and their agriculture was advanced. Unfortunately relatively little of their culture has survived in comparison with those of the Achaemenians and Sasanians, but there is no mistaking its importance.

The Parthians, eventually weakened by frequent wars against invading Armenians and Scythians and at odds among themselves, were defied by a vigorous provincial princedom in Fārs, whose people were the guardians of the shrine of Anāhitā the Zoroastrian manifestation of water. In AD 208, the ruler Ardashīr I gradually began to establish local and regional authority, before openly defying the Parthian King Artabanus V whom he defeated in AD 224. This inaugurated a new dynasty, the Sasanians, which was named after Ardashīr's grandfather, Sāsān, taking its inspiration from an earlier religious tradition and the mythology of an imperial golden age. It was, however, an Iranian revival, not an Iranian renaissance, and much was taken over from Parthian practices. In two major respects, though, Sasanian attitudes differed from those of their predecessors. They were more deliberately centralising in their policy, stressing again all the magnificence of a monarchy, and they established a state religion with its attendant priestly caste. Society was thereby differentiated into clearly defined social classes, and the administration of government was organised on a hierarchical basis.

The new dynasty carried all before it, imbued with a sense of religious conviction and showing remarkable military powers. It appeared to be invincible when Ardashīr's son, Shāpūr I, captured the Roman Emperor Valerian, in AD 260. This event with its symbolic glorification of royal victory was depicted on a number of monumental rock reliefs like those at Naqsh-i Rustam, appropriately near the tombs of the Achaemenian Kings, as if to

demonstrate a form of monarchical continuity. The Sasanians, however, suffered from a recurrent series of crises throughout their history. In AD 272 the prophet and reformer, Mānī, was executed in reaffirmation of strict Magian religious orthodoxy. This intolerance of the majority of Sasanian monarchs towards faiths and peoples other then their own was an unfortunate aspect of the Sasanian character, exacerbating, when it should have been reconciling, differing interests. At all events Sasanian power was defeated when, in AD 283, the Roman Emperor Carus, sacked the capital, Ctesiphon, near modern Baghdad.

The accession and long reign of Shāpūr II (AD 310–79) restored the Sasanian empire and checked the Roman challenge. Shāpūr left a legacy of secure frontiers, a full treasury, domestic stability and respect, which his successors after some time dissipated in fratricidal strife, incompetent administration and military insecurity. Yet, once again a brilliant king came to the rescue of a declining dynasty. Khusrau I, Anūshīrvān ('of the immortal soul') succeeded his wayward father Kavād I in AD 531, and curbed the power of nobles and priests, reformed taxation, rectified the financial situation, revived trade, reorganised the army, reached a *modus vivendi* with the Byzantines, who had replaced the Romans as the other major power in the Near East, and defeated the Hephthalites whose raiding and pillaging were threatening the security of the frontiers. Khusrau strongly promoted the arts and encouraged learning by patronising artists and scholars. His achievements were as distinguished as his character and he is remembered with respect as the most illustrious of the Sasanian kings.

The success of Khusrau was, however, splendid like a meteor. The succeeding century revealed the dynasty at its worst and best. Perhaps the reign of Khusrau II, Parvīz, ('the Victorious'), AD 596–621, epitomises this state of affairs. He was dethroned, exiled, protected by the Byzantine Emperor Maurice, reinstated, and finally, after a lifetime of fickle fortune, was assassinated in a palace revolt instigated by his son. The hero of an amorous story with his concubine Shīrīn, the conqueror of Jerusalem, cruel, despotic and avaricious he was the favourite of none, and feared by many. Within no more than a decade the proud period of Sasanian rule was ended, falling victim to a religiously inspired and militarily ambitious Arab campaign. The defeat was decisive. A people weary of wars and depressed by servitude welcomed the deliverance promised by the Islamic invaders.

Islam came to permeate the minds of the inhabitants on the Iranian plateau, pervaded their view of the divine and influenced their attitude to life. Yet a paradox is apparent. The defeat of the Sasanians released the genie of their glorious legend. Stories of the hunting exploits of Bahrām Gūr, the sage counsel of Anūshīrvān and the amorous exploits of Khusrau later inspired the poet, Firdausī to keep alive the cultural consciousness of these traditions for his Persian contempories. His epic, *Shāh-nāmeh*, completed in *c.* AD 1000, represents the most permanent expression of the pre-Islamic Iranian cultural legacy, idealising the ancient virtues of the Persian peoples like the *Iliad* or the *Aeneid* did for the Greeks and the Romans.

The reasons for the success of the invading Arabs have been argued passionately with more chauvinism than understanding, but they have more to do with the qualities and actions of men than with the accident of their race. The core of the Sasanian administration had become rotten. It simply fell apart. Bureaucrats had usurped the functions of kings, and forfeited the esteem of the people by their oppression and excessive taxation. Loyalty is not an abstract virtue; for most people it is a recognition of mutual self-interest. There was, therefore, little to prevent and much to encourage the process of conversion to Islam. One result of the Arab invasion was a less close Persian association with Mesopotamia, which, at least until 656/1258, was identified with the caliphate, centred on Damascus and then Baghdad. This was offset by a deeper involvement in the vigorous north-eastern cultural heritage of the Iranian plateau, with immeasurable later cultural consequences, especially for painting.

The political and cultural history of Persia over the next few centuries is fascinating but complex as people came to terms with the new situation. Two centuries later, the first of a number of local minor principalities was formed, the Tahirids, in Khurāsān (205–59/820–73). They were displaced by the Saffarids (253–98/867–910). Then, based on Bukhārā and Samarqand a new dynasty arose whose limits stretched from India and Turkestan almost to Baghdad. These were the Samanids, (279–389/892–999) an indigenous local people of Iranian origin who fostered their cultural traditions and encouraged a literary revival without challenging the value of Arab culture. The poets Rūdakī and Daqīqī, and the philosopher and scientist Avicenna were patronised at the Samanid court. Another local dynasty, a military autocracy, was the Buyids, (320–454/932–1062), competing with other local powers, who arose from the mountainous area south of the Caspian Sea and extended their authority south to Fārs and westwards to Mesopotamia where they briefly occupied Baghdad, but left the caliphate in peace. 'Aḍud al-Daula revived earlier Persian monarchical practices and in 370/980 his coins were minted with the title 'Shāhānshāh'.

The tendency to independence from the caliphate, was given further impetus with the advent of Turkish mercenaries in the north-east, who first attached themselves to local rulers and then overthrew them, as was the case with the Ghaznavids (366–431/977–1041), who served the Samanids and then established themselves in Ghazna. It was at the cosmopolitan court of the most famous and unpredictable of their rulers, Maḥmūd (388–421/998–1030), that Firdausī composed his *Shāh-nāmeh*. This was a time when the people were not politically or economically suffering and the conditions of life were not generally unfavourable with some recovery in trade and agricultural prosperity. A developed urban life with merchants and artisans existed. The rise and fall of the local principalities resembled local rivalries rather than the protracted frontier struggles which had debilitated the Sasanians.

Into this divided and unstable but generally peaceful atmosphere, suddenly erupted the Saljūqs (428–552/1037–172). They defeated the Ghaznavids in 431/1040 and fifteen years later they extracted from the caliph in Baghdad the title of 'Sulṭān'. In the time of Malikshāh (465–85/1072–92) their sultanate stretched from central Asia to Damascus and they had forced the Fatimids of Egypt and the emperor of Byzantium to come to terms with them. They inaugurated a new political empire over the peoples of the Iranian Plateau. After the shock of their invasion had subsided, the Saljūqs created an environment conducive to learning and the patronage of the arts. Their rule was a cultural period of intellectual activity. Many features, which are now a recognised part of the Iranian cultural tradition, were enunciated in this period during which Abū Ḥāmid al-Ghazālī, the philosopher, (450–505/1058–111) formulated much of his thought, Niẓām al-Mulk (410–85/1019–92) the statesman, established an influential educational system and expressed a celebrated political philosophy in his *Siyāsat-Nāmeh*, and 'Umar Khayyām, (439–526/1048–131/2) a scientist, as well as a distinguished poet, was engaged in astronomical research. Sufism flourished in a period of rich religious expression.

Just when it seemed that this intellectual ferment and tolerant atmosphere was producing its finest cultural achievement, the Mongol invasion occurred in 617/1220. Once again a ruling dynasty distintegrated and in the aftermath of local quarrels half a century later, Chingiz Khān scythed his way across the plateau leaving a trail of destruction which decimated the population and ruined the land. Recovery was slow and some cities like Nīshāpūr never revived. It was a political disaster, an economic tragedy. A strain of self-pity and resignation and the expression of a sense of mysticism about the sufferings of this transitory world and the permanent presence of the divine is reflected in the poetry of Jalāl al-Dīn Rūmī b.604/1207, whose *Mathnavī-i Maʿnavī* is concerned with this theme.

Gradually some of the effects of the catastrophe healed and under the later successors of the 'World Conqueror', the Īl-Khāns, a new order was imposed. Hülegü, son of Chingiz Khān, who sacked Baghdad and put an end to the caliphate in 656/1258, also suppressed he hashish-taking sect of the Assassins who were accused of spreading dissension and heretical beliefs from their almost impregnable mountain fortresses, like Alamūt. Ghazan Khān (694–703/1295–1304) the most capable of the Īl-Khāns, following whose example the Mongols embraced Islam, erected notable educational and religious buildings at Tabrīz and reformed the iniquitous tax administration. He started land reclamation, instituted new financial measures aimed at eliminating usury and tried to stimulate trade and manufacture. Marco Polo reported on the positive efforts of the Īl-Khāns to exploit the resources of the land. The Mongols retained control of the military establishment organised on tribal lines, but, few in number in comparison with the total population, they conceded much local autonomy.

After the death of Öljeitü, a great patron of the arts (703–15/1304–16), who built his capital at Sulṭāniyya, a reaction set in and no leader was able to wrest enough authority from his reluctant subordinates to maintain his undisputed supremacy and the empire split into separate principalities like the Jalayirids (736–835/1336–1432) who ruled in Mesopotamia or the Muzaffarids (713–95/1314–93) who established themselves around Iṣfahān and Shīrāz, where during the reign of Shāh Shujāʿ the great poet Saʿdī (720–92/1320–90) lived. There was almost incessant feuding between such princes but patronage of the arts and literature continued on a provincial scale. The main loser was the peasant, who became more dependent than ever on his master, tied in bonds of economic servitude. Uncertainty over land and water rights in a country so dependent upon climatic conditions and sustained agricultural effort, undermined and reduced crop yields. The fleecing of the peasant by unscrupulous tax collectors aggravated an already difficult social situation.

The restless ambition and military genius of Tīmūr brought him up against the divided princedoms of the plateau in 781/1379 and by courage and cruelty he beat them into submission. His passion for conquest was only matched by his patronage of the arts, in his capital, Samarqand. According to Clavijo, the Spanish emissary who visited him there in

805/1403 on an embassy to enlist the support of Tīmūr against the Turks on behalf of Christendom, he had created a beautiful city by employing artists from many lands on its construction. Tīmūr stripped countries of their resources for his own purposes, and deprived them of their political institutions. In Persia on his death 807/1405 his successors came to an accommodation with the existing bureaucratic and landed classes, who re-established their own control subject to the nominal supervision of the Timurid governors. It was a loose relationship exercised from Herat and only effective in the northern and eastern provinces. Following this the principal Timurid rulers were Shāh Rukh (808–50/1405–47), Ulugh Beg (796–851/1394–1449) and Bāysunqur (d.837/1433) and they were better scholars than generals or administrators. Their political influence was limited. Their devotion to the arts was important, particularly in architecture and painting for they determined a style, a model of perfection for later artists, which was subsequently refined but never discarded in the classical Persian repertoire.

In the second half of the 9th/15th century, the people of the Iranian plateau and parts of present Iraq witnessed a return to rule from the west when two rival Türkmen tribal groupings competed for power. The Qara-Qoyunlu (Black Sheep) were successful at first but then the Aq-Qoyunlu under Uzun Ḥasan (853–82/1449–78) were victorious. Jahān Shāh who built the Blue Mosque at Tabrīz in 1465 was defeated by Uzun Ḥasan who welcomed Venetian ambassadors to Tabrīz. It was not surprising that a small and determined religious military brotherhood, whose roots were in the independent Caspian region and had influence across Anatolia, should have made a bid for power on a local, regional and then national scale. In 899/1494 Shāh Ismāʿīl, the first of the Safavid dynasty, as it came to be recognised, a precocious youth, only seven years old, took over the leadership of the Qizilbash, devoted Shīʿīte followers, who were recruited mostly from the Turkish tribes of Āzarbāījān and Anatolia. Within a few years in 907/1501 he had established his authority, defended himself from the attacks of the Özbegs in the east and confronted the Ottomans in the west.

It was an extraordinary display of bravery not really diminished by his defeat at the hands of the Ottomans under Sulṭān Selīm at the battle of Chāldirān in 920/1514. This reverse, however, did not detract from the religious awe in which Shāh Ismāʿīl was held, nor diminish the sense of unity which he had engendered. The long reign of Shāh Ṭahmāsp (930–84/1524–76) in spite of internal tribal dissension and Ottoman and Ozbeg attacks, was one of consolidating Shāh Ismāʿīl's legacy. Indeed the attributes of being Persian in the modern sense of national identity owes as much to the conviction of Safavid inspired Shīʿīte religious and national independence as any definable racial characteristics. Thus in a very real sense, the feeling of being Persian is derived from the intense theocratic discipline imposed by the Safavids, to foster an identity and common purpose after years of living under alien rule. Under the Safavids the sense of being Persian becomes a reality for the peoples of the Iranian Plateau, acquiring a cultural significance. The hostility of the Ottomans was countered by daily curses and military readiness, which kept the people in a high state of national tension, emphasising the different characteristics which separated them from their neighbours. What began as a conscious effort became a characteristic, an evolving sense of a distinctive identity.

These sentiments, however, did not prevent the Safavids from succumbing to human frailties in their turn and in common with other dynasties they also had their share of intrigue, revolts and decadence. They were suspicious and frequently the succession of monarchs was marred by family murders. Their collapse in 1134/1722 before the assault of the Afghans, whom they despised, was a classic example of excessive pride before a lowly fall. Described by a French observer as apparelled more for a tournament than a battle, the Safavid army was beaten by a few thousand goatherds.

Under the Safavids Persian contacts with Europeans began. Trading relations were established and many travellers visited the land of the 'Great Sophy'. References to Persia appear in Spenser, Shakespeare and Milton. Travel literature as written in European languages in the 16th century and by the end of the 17th was extensive in the pages of Thomas Herbert, Adam Olearius, John Fryer, Jean Baptiste Tavernier, Jean Chardin, and Engelbert Kaempfer. Shāh ʿAbbās the Great (995–1038/1588–1629), the most successful of the Safavid rulers, was inquisitive and tolerant, determined to strengthen the Persian economy and make it independent of Turkish connections. He improved communications, built bridges, bazaars and caravanserais, regulated road patrols, overhauled the administration and recruited his court officials on a new basis largely from Georgian converts to Islam. He entrusted Armenians with trade missions, and they later came to dominate the foreign trade. So successful was the Safavid patronage of the arts that there is no mistaking the particular appeal of Iṣfahān, the capital, which is as consciously impregnated with a Safavid 'presence', as Persepolis is Achaemenian.

The complete collapse of the Safavid dynasty under the later Shāhs, Sulaymān (1077–105/1666–94) and Sulṭān Ḥusayn (1105–35/1694–1722) and the internal chaos which resulted, prevented the early establishment of any alternative Persian rule, in spite of the weakness of the invading Afghans. Nādir Shāh (1148–60/1736–47) and his invasion of India only served to illuminate the general plight of the country and its fleeting military fame. Tribal struggles for supremacy failed to produce a real power base for strong central government. The well-meaning but short-lived Zand dynasty provided in Shīrāz a special centre of peace and prosperity for the province of Fārs. It hardly outlasted the lifetime of its founder, Karīm Khān (1163–93/1750–79) and his romantic but unfortunate son, Luṭf ʿAlī Khān who was no match for the brutal eunuch, Āqā Muḥammad Khān (1209–12/1794–7), the first of the Qājār rulers, whose dynasty ruled throughout the 13th/19th century until the abdication of Aḥmad Shāh (1327–43/1909–25) in 1925. The Pahlavi dynasty followed under Rizā Shāh and Muḥammad Rizā Shāh till 1979 when the Islamic Republic was instituted.

The Qājār rulers were vacillating and much attached to the ceremonial of their position. The splendours of the past were invoked in attempts to portray a contemporary magnificence. Fatḥ ʿAlī Shāh (1212–49/1797–1834) with his numerous progeny and his imposing figure, pictured himself as a latter-day Achaemenian. Such vanity was forgivable on rock reliefs and paintings, but misdirected when attempts at reviving imperial prestige by military expeditions abroad only served to irritate, not improve, relations with neighbouring states such as Āqā Muḥammad's ill-fated expedition to wrest Georgia from Russia. Persia did not experience the industrialising changes of 19th-century Europe and became a commercial backwater. Lack of technical education and capital impeded the modernising and reforming programme initiated by Nāṣir al-Dīn Shāh (1264–1313/1848–96) in the 1870s. Later, social and political pressures culminated in a constitution in 1906 but this failed to fulfil the expectations that were anticipated, leaving the people frustrated. The half century of more authoritarian Pahlavi rule brought about much modernisation and created an industrial base for the country, but in the process antagonised those who preferred a more traditional approach to development.

A simple historical account whilst it marks out the chronology does not convey the character of the people of Persia nor the grandeur of the scenery. The people have been imaginative, courageous and resourceful under a succession of leaders, illustrious and disastrous. For most of their history Persians have had their roots in rural communities, distinguished for self-sufficiency and local independence. Hence, the reputation of different towns for particular products or qualities such as Kāshān for velvets or Rasht for humour have been accentuated by the spatial immensity of the landscape with its vast plains, elongated valleys and rugged mountainous chains. Until the 20th century, transportation of peoples and goods have been by camel, donkey, horse or mule; there were few wheeled carriages. Because distances are so vast, a sense of separateness has been inevitable. Clothes, customs, habits, handicrafts have been distinctive and tenaciously and proudly preserved for centuries. Areas of comparative physical and cultural isolation have existed from ages immemorial.

Migrations, invasions and occupations have both destroyed and stimulated aspects of Persian life. The history of Persia, therefore, has been unsettled and the survival of a Persian sense of cultural identity in religious, political, social and artistic terms has resulted from adaptability as much as resistance. The Greek historian, Herodotus, 485–24 BC, remarked on the propensity of Persians to imitate the peoples of other lands. So at Persepolis there are recognisable Egyptian, Greek and Assyrian motifs and modes of expression which are harmonised in the creation of an Achaemenian style. Decoration and calligraphy have been influenced by Arab expressions of abstract patterns and the emphasis on beautifying the word of God. In painting one can only glimpse at earler sources, but Chinese, Central Asian and later some European treatment and themes make their appearance in the point and counterpoint of cultural interchange in the illustrative arts. This assimilation, however, has been frequently tempered by a responsive individualism spurning foreign influence. Development has tended to become repetitive and acceptably traditional until fresh inspiration has emerged. A similar ambivalence towards minorities is also noticeable. Apparent contradictions are observable too in the character which manifests itself in a sense of pleasure, extravagance and amusement but has moments of melancholy, austerity and fatalism. It is a rich legacy in which resignation and determination have been notable qualities. Towards the beginning of the 20th century a quickening of the political pulse occurred as the cities attracted more people to a more modern existence. Some of these people have wanted to return to traditional ways of life, others have been stimulated by the opportunities of a new age. It remains a dilemma, yet another crossroads in Persian history, with important implications for artistic expression.

Moreover, whilst much artistic achievement has been imperial in scope with impressive majestic monuments like the palaces or commemorative sculptures of the monarchs or

associated with royal patronage like the illustrative arts of the book or the manufacture of carpets, there has been an ever-present tradition of craftsmanship. The decorative patterning of the tile-maker, the colourful textiles of the weaver, the expressive shapes of the potter, the malleable skills of the metal-worker and others have all contributed to the impressive range of Persian art, which is often imaginative.

2 EARLY ART

INTRODUCTION

1. Figurine from Tepe Yaḥyā, H. 28 cm.



In Europe, the story of Art begins with the cave paintings of the Upper Paleolithic period. Although paintings have been found in rock shelters in the Zagros they are probably much later in date.[1] The genesis of Persian Art is not definitely attested before the end of the eighth millennium BC, when stone bowl fragments and crude clay animal figurines are found in the first tiny village settlements. Iranian peoples in the past, so far as we know, only had leisure to devote to the arts after they had settled and once their food supply was secure.

The era between 7000 BC and the onset of the Achaemenian empire is divided up by archaeologists into a number of periods. The Neolithic and Chalcolithic (*c.*7000/3200 BC) antedate the beginning of written records and cover the time when men were settling down into village life, learning to farm efficiently, weave, make pottery and smelt copper. The 400 years between 3200 BC and 2800 BC are known as the Proto-Elamite period, after the cryptic picture-writing that appears on clay tablets at Susa and a number of other sites. It was an era when, all over the Near East, men were beginning to live in larger units – cities or city states – and acquire the arts of civilisation. The lead in this development was taken by the Sumerians of Southern Mesopotamia, and when, *c.*2325 BC Sargon of Akkad made himself master of Sumer and cast covetous eyes at his rich neighbour to the east, Persian history emerges from the shadows.

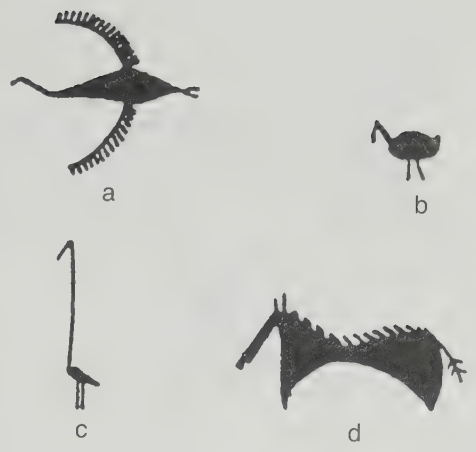
According to Mesopotamian texts, the western part of the land at this period was inhabited by people known as Elamites, so far as we know indigenous to the country, and speaking an agglutinative non-Semitic language which is still imperfectly understood. They were organised into a loose federation of states centered on Khūzistān but stretching north into Luristān and south to Fārs and Bushire on the Gulf. The location of many of these early political centres such as Awan or Simash is still uncertain. The most important Elamite sites to be excavated so far are Susa, Haft Tepe and Chogha Zanbīl on the Khūzistān plain; and Tepe Malyān, the ancient Anshan, on the Marv Dasht plain near Persepolis in Fārs.[2]

The Elamites drew their wealth from their mountainous hinterland and the desert beyond, whence could be obtained wood, good building stone, metal ores (copper, silver, gold, lead and probably tin), semi-precious stones, all of vital importance to the merchants of Mesopotamia which was then rich agriculturally but lacked raw materials. Very early in its history Susa became a vast trading emporium, controlling routes into the interior as far as Balūchistān, Sīstān, Afghanistan and possibly India. Recent excavations in sites in eastern Iran have shown how cities in this area could, in the Proto-Elamite era and subsequent Early Bronze Age, gear their economies to the Mesopotamian trade. At Shahr-i Sukhteh for instance, a city larger than contemporary Ur grew up in the Helmand oasis of Sīstān. Apart from the usual agricultural pursuits, the inhabitants seem to have made a corner in the lapis lazuli trade, importing the raw material from Badakhshān and working it up into beads and pendants for export to the west. Carnelian, imported from the Hindu Kush, and locally mined alabaster formed profitable side lines. At Tepe Yaḥyā, east of Kirmān, steatite (chlorite) was mined locally and worked up into seals and figurines and engraved vases were traded from Sumer to India (pl. 1). At Tall-i Iblīs, not far way, the whole village was organised from the late fifth millennium BC onwards around the smelting of copper. At Shahr-i Sukhteh craftsmen formed a privileged class, had a special area of the city set aside for their workshops and were buried in graves of unusual richness. The artist starving in a garret is a modern phenomenon.

From the later third millennium onwards, Elam was rarely free from Mesopotamian interference. First the Akkadian successors of Sargon, then the kings of the Third Dynasty of Ur campaigned in the mountains and claimed suzerainty over Susa. The kings of Elam struck back, raiding Mesopotamia, and about 2006 BC carried off the last king of Ur into

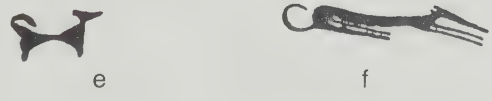
exile in Anshan. The influence of Mesopotamian civilisation was less easy to shake off and the love-hate relationship between the two lands continued throughout the Old Elamite period at the beginning of the second millennium.

For a brief period in the 13th and 12the centuries BC – usually termed Middle Elamite – Elam under its powerful kings Untash GAL and Shilhak Inshushinak was the strongest state, but the situation was too good to last and in the first half of the first millennium BC – the Neo-Elamite period – the kingdom of Susa had new rivals to contend with. Iranian migrants, of whom the best known representatives are the tribal groupings of the Medes and the Persians, speaking an Indo-European dialect ancestral to modern Persian, came pressing in from the north and east. They established themselves in the old Elamite hinterland and cut the trade routes. At the same time the Assyrians moved down from northern Mesopotamia and in 639 BC. Ashurbanipal roared through Khūzistān leaving not one city intact. So complete was the devastation that even today, after a great deal of excavation, we are still woefully short of good examples of Elamite imperial art, which in consequence is usually compared unfavourably with that of Mesopotamia. Could we but find untouched royal tombs, like those of Ur, instead of headless statues, the picture might be rather different.



POTTERY

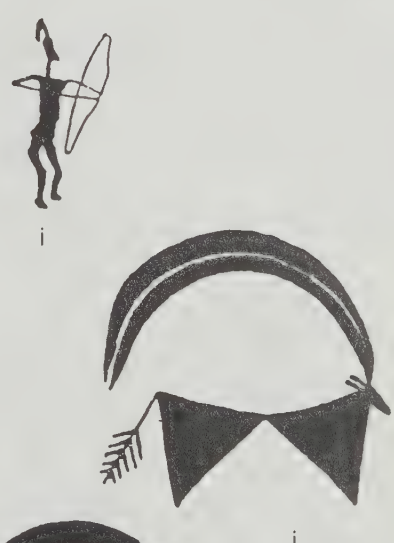
Pottery appeared early. In the west, at Tepe Guran in Luristān, thick walled bowls made in the same coarse greyish clay as the figurines appeared before the middle of the seventh millennium BC. The unfired wares that must have proceeded this development have been preserved by a freak fire at Ganj Darreh Tepe in a level that may be even earlier than 8000 BC.[3]



The period from then until the end of the fourth millennium BC was marked by progressive technical refinements. The earliest decorated wares are straw tempered and have either a red slip or are painted with geometric patterns in a fugitive red paint. By the Late Chalcolithic, pottery had developed into an art form in its own right: hard, well-fired grit or sand-tempered wares in cream, buff or terracotta were decorated with elaborate painted designs in red, dark brown or black. The best of these designs combined stylised animal forms with geometric motifs in panels and bands that exactly balanced and enhanced the shape of the vessel.



The amount of broken pottery of very high quality that can come from even a small Chalcolithic site has to be seen to be believed, and on large sites like Siyalk or Hissar that cover several acres it takes on the dimensions of an archaeological nightmare. Clearly, fine bowls and vases were within the reach of the humblest households – later art objects such as metal vessels or decorated weapons tended to be the preserve of the rich. Regional centres, each with its own distinctive style, abound, but the finest wares came from Susa, which must even then in the second quarter of the fourth millennium have been an important political and commercial centre. The motifs are pastoral, harking back to the Khūzistān countryside and the mountains beyond. Long-necked water birds, standing knee-deep in the brackish trickle of an irrigation ditch and flying birds form the border to an elegant beaker; hunting dogs strain at the leash; a mountain goat, its horns elongated into a dramatic spiral, stands poised on a rock challenging all-comers.



Elsewhere the Chalcolithic tradition continues till 3000 BC or later. At Siyalk, in the Kāshān oasis, the animal figures tend to be solid, more naturalistic; at Bakun, Nokhodi and other sites on the Marv Dasht plain, more fantastic (pl. 3). Here the accent is on ever greater stylisation until the shape of the animal or plant that inspired the original design is lost in a geometric abstraction. A goat is reduced to an enormous pair of horns; lizard-men hold hands round the side of a pot like a child's pleated paper cut-out; boars like elongated dachshunds chase their own tails round the inside of a cup. At Tepe Hissar the spotted leopard, whose name *palang* is still a favourite appellation for hunting dogs, is reduced to a meaningless jumble of streaks and dots (pl. 2a and b).

After the highpoint of the Susa A wares *c.*3500 BC the painted pottery tradition of Khūzistān declined in favour of mass-produced wares made on the wheel. It seems that the artists now turned to the newer crafts of metalworking, stonecarving, seal-cutting, which were coming into their own. There was a brief revival in the second quarter of the third millennium ('Susa D') when large polychrome jars, related but not identical to contemporary Early Dynastic wares from Mesopotamia, made a brief appearance (pl. 4). One very fine example from an outlying cemetery in the Jelian hills in Fārs has the earliest known representation of the four elements – symbolised by deer, game birds, fish and fire, painted in panels below the shoulder of the jar. Fine polychrome pottery also comes from sites such as Haftavan and Dinkha Tepe near Lake Urmiyyeh in levels dated to *c.*2000 BC.



2a. (*previous page and this page*) Prehistoric pottery motifs: a–k, Susa I; l–r, Susa II; s–w, Tepe Musiyan.

2b. (*facing page*) Prehistoric pottery motifs: a–c, Nihāvand IV; d–f, Siyalk; g–h, Ḥiṣār I; j–n, Ḥiṣār II; i, Rayy.


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Otherwise, mass-produced painted pottery, wheel-made and lacking the inspiration of the Chalcolithic wares, continued to be produced in much of the countryside throughout the third and second millennia. However, in the north-east, at Tepe Hissar on the Dāmghān pass, and sites on the Gurgān plain like Shāh Tepe, Turang Tepe and Yarim Tepe, a new style evolved, whether spontaneously or as the result of invasions from elsewhere is still disputed. Painted styles were gradually replaced by a fine, closely textured, grey were which developed, by the end of the third or beginning of the second millennium BC into some of the most sophisticated pottery ever produced.[5] Wafer thin and made in a variety of interesting angular shapes, some obviously inspired by metal prototypes (pl. 6), the surface of the pottery was highly polished and decorated with intricate pattern burnishing.

Plain red, grey and buff wares are also characteristic of the pottery of the incoming Iranian tribes and can be used to trace the westward course of their migrations.[6] At Hasanlu, a big city mound at the foot of Lake Urmiyyeh, they replace the local painted wares *c.*1350 BC at the beginning of Level V (the start of Iron Age I) and reach their peak in Level IV (Iron Age II, *c.*1000/800 BC). Plastic decoration, ribbing, grooving and incision, animal-headed knobs and handles, and multiple vessels are all common, and the most dramatic shape of all – a ritual vessel with a protruding horizontal spout shaped like the bill and crop of a heron – becomes the hall mark of the Iron II cultures in the western regions. Vessels in the shape of animals and men like the modern Toby Jug are also popular, particularly in the Amlash region, south-west of the Caspian. The humans are grotesque (pl. 9), but the humped bulls and deer, though strongly stylised, have movement and grace and power like the best of the Chalcolithic pot designs (pl. 5). My own favourite is a deer from Marlik Tepe, its head slightly turned towards the side, its ears cocked, caught in the instant before flight.[7] When these new elegant shapes are combined with the native painted pottery traditions coming from further south in Luristān or Siyalk (pl. 7) the result is an 8th-century renaissance – the final manifestation of an age-old cultural tradition before the mass-produced wares of the Achaemenian empire take over.

3. (*above left*) Late Calcolithic vase from Tali-i Nakhodi, *c.*3000–2750 BC.

4. (*above right*) Painted vase from Susa, *c.*2500 BC, Musée du Louvre, Paris.

5. (*right*) Earthernware zebu vessel, south-west Caspian region, *c.*900 BC, The Metropolitan Museum of Art, New York, Roy R and Marie G Neuberger Foundentin In. Gift 1961.

6. (*facing page top*) Pattern burnished Grey Ware from Yarīm Tepe *c.*2000 BC.

7. (*facing page below*) Two views of pottery from Siyalk, 1000–900 BC, Musée du Louvre, Paris.



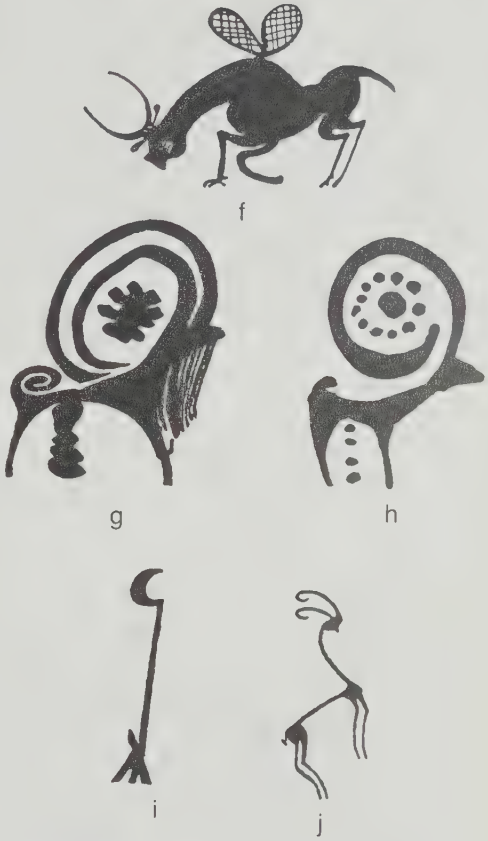




ARCHITECTURE

Elamite architecture is typical of the semi-desert environment of the Middle Eastern lowlands. In an area where wood is in short supply and the timber available adequate for spanning roofs, but not really tall or strong enough for columns, and far too expensive to be wasted on firing brick kilns, sun-dried mud-brick is the universal building material. Baked brick is reserved for facings, inscribed bricks and special effects; rooms can be as long and high as the builder desires but no more than 4 or 5 metres across; and houses have small windows and face inwards on to courtyards, giving the inhabitants privacy and shelter from the glare of the midday sun. Second-millennium houses at Susa, however magnificent – and the king's officials lived in veritable mansions – were all built to roughly the same plan. Their main feature was a big central reception room leading off a large rectangular courtyard; smaller rooms, opening off each other rather than the court, surrounded the other three sides, and subsidiary courts and reception parts accommodated relatives, guests and servants, Too few Elamite towns have been excavated to ascertain whether it was common practice to surround some of the temple courts with a brick cloister, such as that recently discovered at Tepe Malyān,[8] but mud-brick columns have been found among the ruins of the temple to Inshushinak on the Susa Acropolis, and it seems unlikely that they anticipated later practices and were used as supports for the main roof beams as one authority suggests.[9] Though wooden roofs were the norm, narrower chambers could be corbel-vaulted and tombs were covered with barrel vaults in which each arc of bricks leant backwards against the previous course – a method of roofing still found in modern villages. At Chogha Zanbīl doors and stairways were spanned by an ingenious approximation to the true arch in which triangular or wedge-shaped bricks alternated with the normal rectangular-sectioned ones.

The ziggurat, pyramidal tower, at Chogha Zanbīl is by far the best preserved and most dramatic example of Elamite architecture and so far there are no similar Iranian parallels (pl. 8). Assyrian reliefs and records commemorating the final campaign of Ashurbanipal









8. The Ziggurat of Choga Zanbīl, side view.

9. Anthropomorphic figure, south-west Caspian region, *c.* 1000–900 BC.

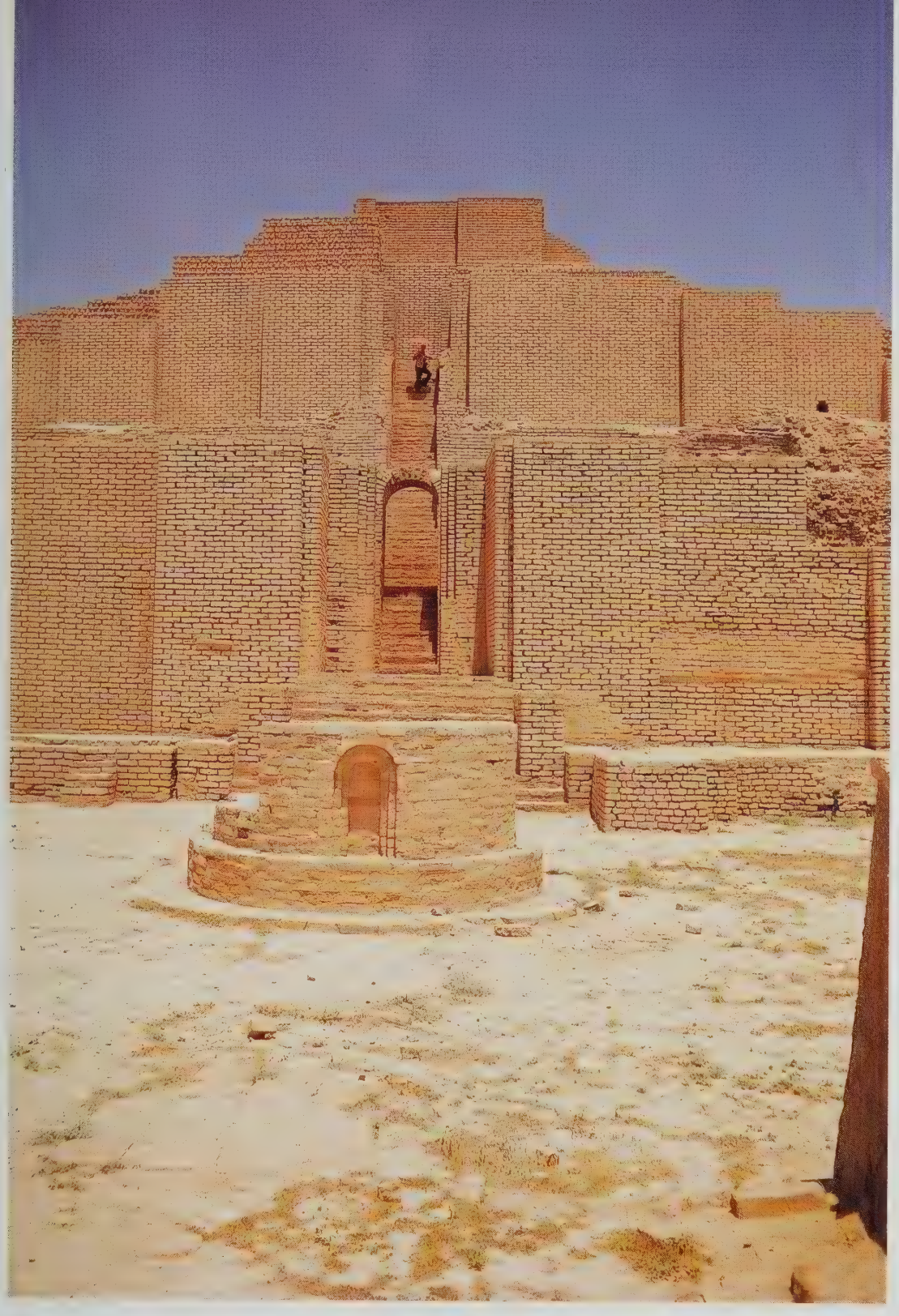


describe a ziggurat at Susa with a blue glazed temple on the summit, surmounted by horns of bronze. Not a trace of this has been found by modern excavators – either the Assyrians used the term loosely to describe the Acropolis with its twin temples to Inshushinak and Nin-hur-sag, or, more probably, the deserted temple tower was later used as a brick quarry. A small bronze model, the *sit shamsi* (sunrise) of Shilhak Inshushinak, is supposed to illustrate part of the Acropolis.[10] It shows priests sacrificing in front of two stepped massifs that face each other across an esplanade, but one cannot be certain of the scale. The massifs could represent stepped temple platforms, temples with odd shaped upper storeys, merely step-aided altars, like the first millennium example from Bābā Jān, no bigger than the officiating priests. Remains of two large but amorphous masses of mud-brick have been found associated with temples at Haft Tepe, but these are so erroded that one can only guess at their original form. In the present state of our knowledge, Chogha Zanbīl is unique in Elam (pl. 10).

Its antecedents lie in Mesopotamia where one can trace the evolution of the ziggurat from very early Sumerian temple platforms. Around the foot of these ziggurats were grouped temples dedicated to the various deities of the pantheon, and the whole complex was surrounded by a temenos (shrine), wall defining the limits of the sacred area. It was this conception that undoubtedly inspired Untash GAL when he decided to build a holy city overlooking the River Diz, and name it Dur-Untash, as we might say, Untashburgh.

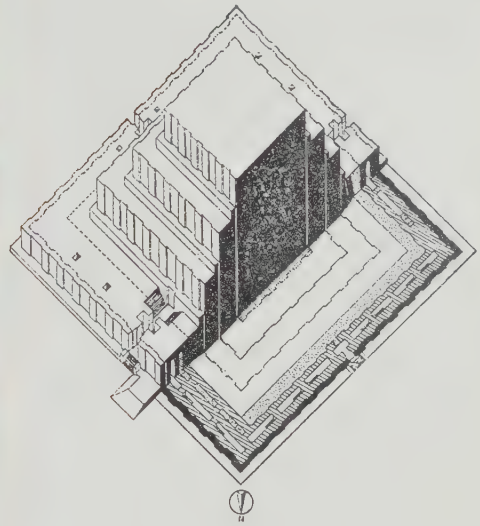
Here, however, the resemblance ends. Whereas the great Mesopotamian ziggurats at Ur and Aqar Quf were built up from horizontal layers of mud brick tied together with bitumen-soaked reed matting, the four stages of Chogha Zanbīl were constructed one inside the other like a nest of Chinese boxes (pls. 11a and b). More extraordinary still, the outer, lowest stage, was built first as a hollow square around an enormous paved courtyard almost 100 metres across, in which one must assume some magnificent dedication ceremony took place before the interior was filled in with the higher stages (pl. 11c). When this happened, a dedicatory temple to Inshushinak and various storerooms that had opened into the central court, were bricked up.

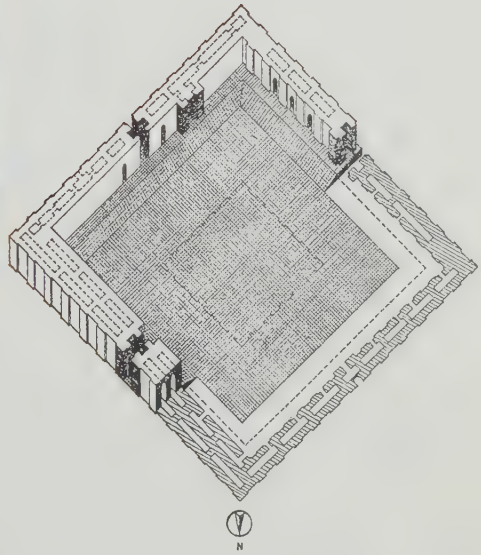
The higher stages were reached by four stairways, one in the centre of each side. The temple on the summit could only be reached indirectly by switching from one staircase to



10. The Ziggurat of Choga Zanbīl, front view.







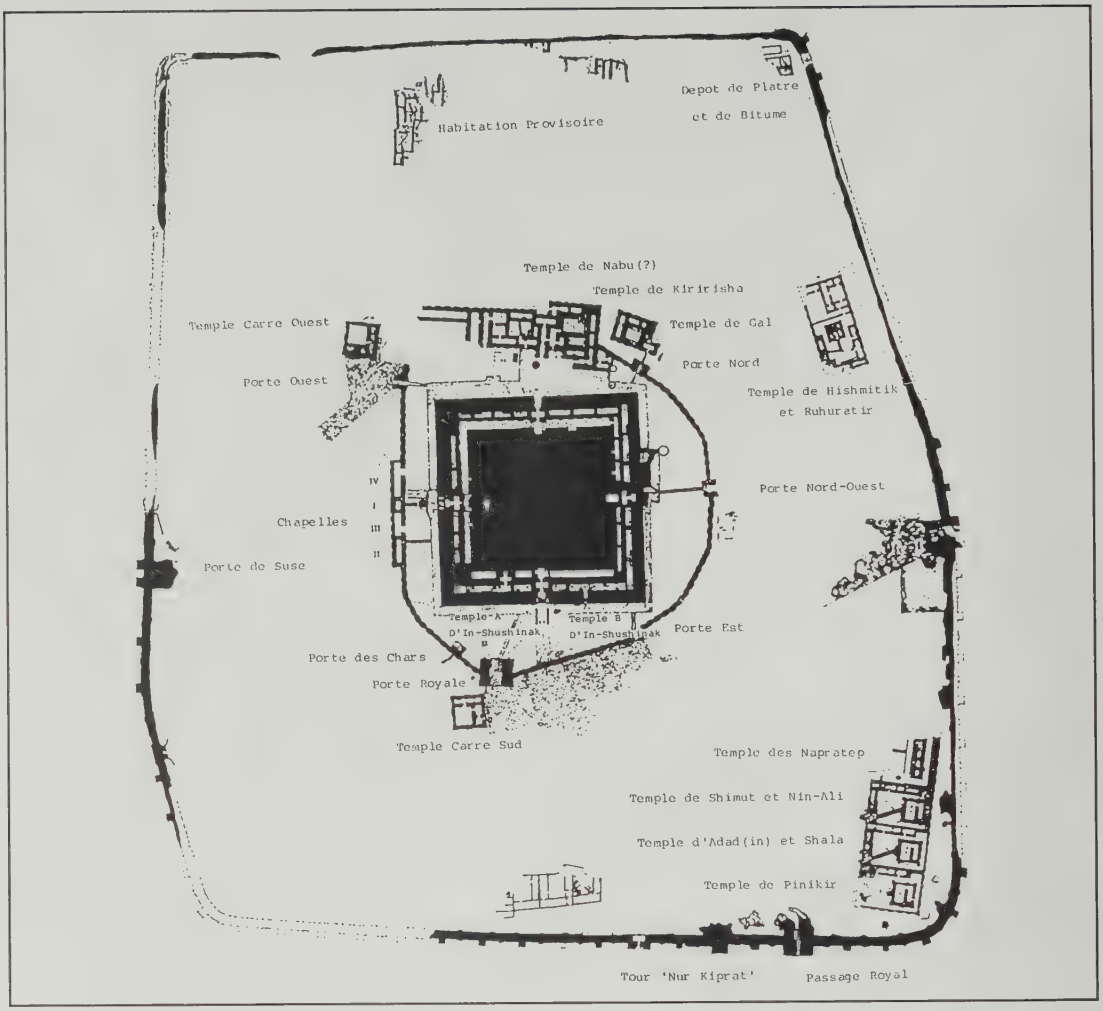
11. The Ziggurat at Chogha Zanbīl: a. Reconstruction Sayyid Muḥammad Taqī Muṣṭafavī. b. Cross-section. c. Ground plan.

another for the final stage (pl. 11a). This contrasts with the Mesopotamian practice of giving direct access to the summit by means of converging ramps. In the surrounding temples the main shrines are placed at right angles to the main axis instead of being directly in line with it, as in Babylonia. One recalls Ashurbanipal's references to the Sacred groves of Susa which no man was allowed to enter, and wonders whether Elamite religion had a secretiveness and mystery about it surpassing that of the dwellers of Mesopotamia.

The surrounding temples and the *porte royale* which led into the inner temenos were richly decorated. Here for the first time in Persian history we find glazing used to offset the dull yellow-browns of mud-brick. The earliest forms of tile were square glazed plaques with a knob in the centre that fitted over a clay plug inserted into the temple wall (pl. 12). Offering-tables on the parvis were made from blue glazed bricks decorated with black-and-white circles or a row of white diamonds. The door of Inshushinak's temple was



12. Tile from Choga Zanbīl.



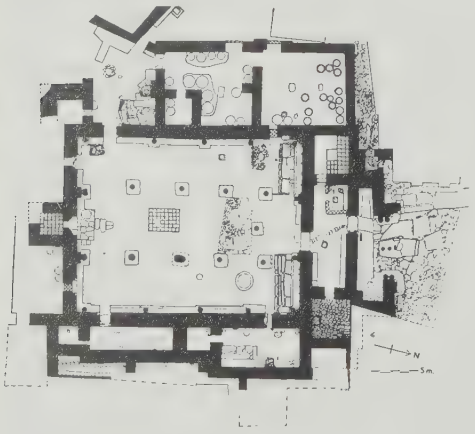
13. The site of Chogha Zanbīl.

embellished with rows of striped glass rods. Surviving tile fragments from Neo-Elamite temples at Susa show polychrome pictures featuring the usual Elamite repertoire of demons or mythical animals, while later Achaemenian practice is fore-shadowed when a design is repeated with variations over the faces of a group of bricks to form a mural.

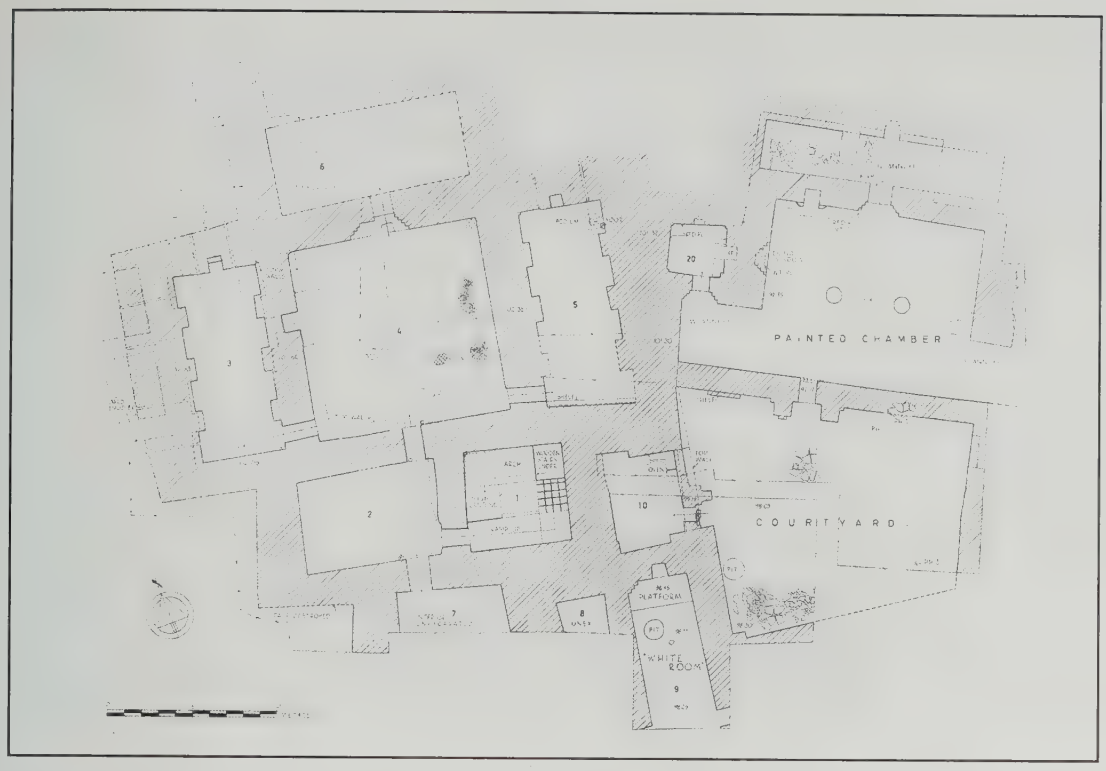
In the outer town beyond the sacred enclosure, excavators have found the remains of three palaces (pl. 13), one of which had subterranean tombs containing the remains of cremations, reached by staircases leading down from three of the palace chambers. A rather similar mausoleum was found at the earlier site of Haft Tepe where two vaulted subterranean tombs below a temple, contained mass inhumations. These buildings may again derive from Mesopotamian prototypes, notably the earlier mausoleum of the Third Dynasty of Ur.

The tribes, who began pushing into the north in the second half of the second millennium, transformed the architecture by introducing wooden columns as an integral part of their buildings, thus widening the roof spans beyond the limit of a few metres imposed by the length of the average tree trunk. The focal point of these residences was a columned hall, either free-standing or surrounded by lower living rooms or loggias. Recent excavations at Hasanlu, one of the earliest and most northerly of the sites in question, have shown that this style of architecture was introduced fully developed along with the new grey pottery in what has been termed Level V, though its most impressive manifestations were in the Burned Buildings of Period IV.[11] It has been argued that the antecedents of these halls lie in the Megara of Bronze Age Anatolia,[12] but whatever their immediate antecedents, it is logical to build columned halls in hilly wooded areas like Anatolia or the Zagros, just as a treeless plain encourages the construction of domes and vaults.

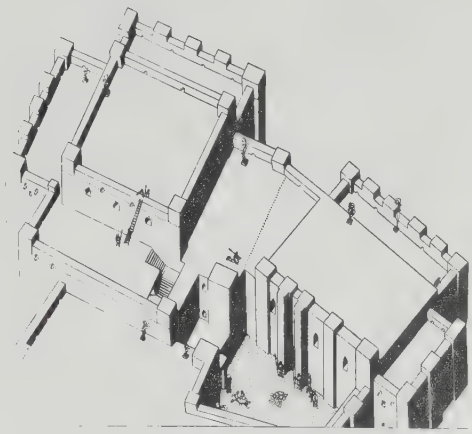
14. Ground plan of Burned Building II, Hasanlu *c.* 1000–800 BC.



The end of the second and beginning of the first millennia BC are something of a dark age in the history of the Middle East; a time of migrations when little states flourished and big empires went into decline. When in the 9th century BC Shalmaneser III, King of Assyria, began to record his forays into the Zagros mountains, the north-west part of the Iranian Plateau was divided into a number of small but rich principalities. Hasanlu would seem to have been a major city of one of these states: Mannea and Parsua have both been suggested.[13]



15. Ground plans of Fort and painted chamber at Bābā Jān.



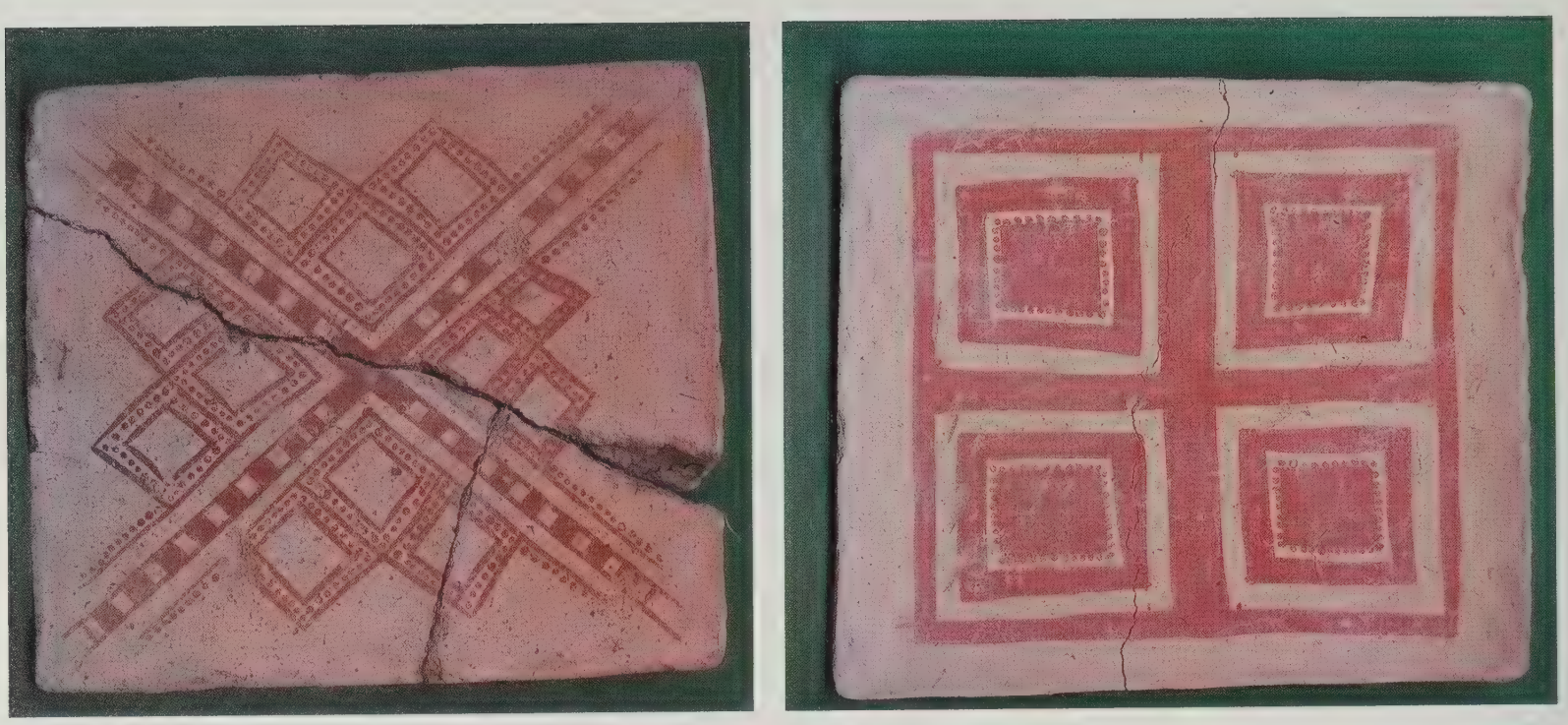
16. Isometric reconstruction of the fort and painted chamber, Bāba Jān.

If it was Parsua, were the inhabitants the ancestors of the historical Persians, who were driven south by the Urartian menace after 800 BC and settled in Fārs, taking their distinctive style of building with them? The arrangements of columns within the two largest Burned Buildings undoubtedly foreshadow those of the Gate House and Palace S at Pasargadae, but to assume that there was a direct migration from one area to another is almost certainly an over-simplification.

The fine columned halls of Burned Buildings I and II are each reached through a portico leading into a small antechamber with a stairwell to the right. Their lofty roofs were supported by two rows of four freestanding columns in the centre of the room, and by further engaged columns arising out of the mud-brick benches that lined the walls. In Burned Building II there was a mud-brick dais at the far end behind which a crenellated doorway led to a small paved room that may have been a shrine. In the centre of the hall was a large rectangular hearth with a paved area in front that sloped down to a large pithos (storage jar), that acted as a French drain. The inference is that the halls had only one storey and the centre of the roof was open to the sky. Around the sides of the halls were smaller chambers, two storeys high, used as living rooms and store-rooms. The two Burned Buildings faced on to courtyards round which were grouped several smaller halls with central arrangements of two or four columns. The courtyards themselves were entered by impressive double gateways flanked by guardrooms (pl. 14).

The strong probability that the architecture of the Burned Buildings marked a stage in the development of the Achaemenian palace was strengthened when, in the mid-1350s/1960s, three more Iron Age sites was excavated in the Central Zagros: Bābā Jān Tepe in central Luristān; Tepe Nūsh-i Jān further west in the centre of the Jukar plain, and Godin Tepe near Kangāvar. All three can be assumed to be Median and they provide the missing geographical and temporal links between Hasanlu and the south.

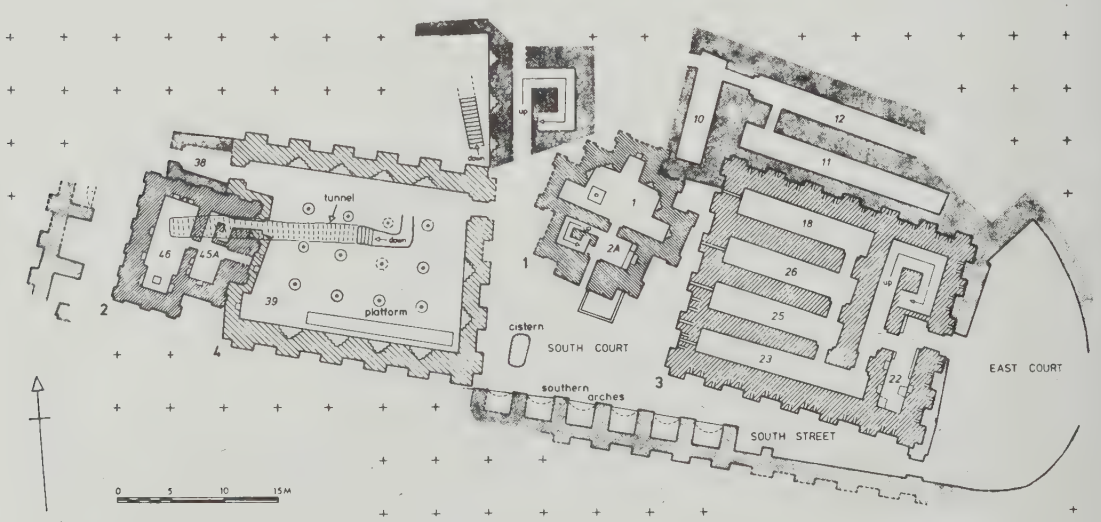
The latest and best preserved of the three fortified 'Manors' that have been discovered at Bābā Jān Tepe probably dates to the latter half of the 8th century BC (pl. 15 and 16). A central hall, approximately 12 metres square and probably of similar height, had a flat roof supported on four somewhat irregular and spindly columns. It was flanked on three sides by long, rectangular living rooms, one of which contained a small stepped podium or altar, and to the south by an anteroom and spiral ramp leading to an upper storey. Beyond, in an area still to be opened up, appear to be a further range of long guardroom-like living rooms. The hall and its surrounding chambers had fireplaces, possibly derived from Elamite prototypes, built exactly like modern ones in the thickness of the wall with a chimney going up to the roof.[14] This enabled the central hall to be roofed in against the Luristān winter – a distinct improvement on the Hasanlu arrangement. Moreover, since the only way it could have obtained any light or air would have been by a clerestory overlooking the surrounding rooms, we have here the first definite precedent for clerestories at Pasargadae.



17. Cruciform tiles from the Painted Chamber, Bābā Jān.

Tacked on to the east side of the fort was on irregularly shaped hall dubbed 'the Painted Chamber' from its red-and-white plastered walls. The central portion (10.40 × 12.50 metres) had smaller annexes leading off to the east and west. Recessed doorways at the back of the main chamber and in the west annexe led to further small chambers recalling those of Hasanlu. Evidence in the east had been destroyed by pitting but if the complex was symmetrical, which seems likely, it would have resembled a triangle with stepped sides. An elaborately recessed blind window was set into the west wall and the floor was covered with the remains of nearly 200 large baked clay tiles painted with cruciform designs in red (pl. 17). From the direction in which they lay it could be deduced that they had somehow been attached to the ceiling between the wooden cross beams, and had collapsed when the building was burnt, probably in an Assyrian foray at the beginning of the 7th century BC. The chamber was probably the reception hall of a local chief, grown rich from the bronze trade.

The same units of columned hall, triangular, step-sided chamber, magazines and impressive fortifications also occur at Nūsh-i Jān, albeit in different combinations (pl. 18). The main buildings are strung out along the summit of a natural shale outcrop, and the most important, the Central Temple, was probably founded shortly before 700 BC. Externally it is shaped like a stepped lozenge and internally it is divided into two sections. In the southern triangle lie the entrance chamber, antechamber and a spiral ramp, whilst in the north an immensely tall, triangular cella (the central part), with stepped sides must surely be



18. Ground plans of Nūsh-i Jān Tepe.

related to the painted Chamber. The walls are decorated with blind windows and recessed crosses, but here the resemblance ends, for in the western arm of the cella is a fire altar, the earliest so far to be discovered in western Iran, and thus the earliest archaeological evidence for fire worship (pl. 19). The altar is of mud-brick covered with white plaster, and the sides step out from a small square base to a wider top with a small fire bowl in the centre. It appears to have been deliberately positioned off centre from the axis of the room, and is screened from the entrance by a low *pisé* (rammed earthen), wall.

A further unique characteristic of the Central Temple is that when it went out of use it was deliberately filled up to the height of about 6 metres with shale chips from the outcrop, and the top was then ceremonially bricked in (pl. 20). This has preserved a most unusual system of vaulting over the antechamber whereby two opposed rows of curved mud-brick struts had their lower edges resting on narrow ledges running along the side walls while their upper edges met above the centre of the room. This type of vaulting, though less sophisticated than the Elamite forms, was used later on by both Parthians and Sasanians.

Close beside the temple, and probably built to protect it, was a rectangular fort. Inside was the usual stairwell and rows of vaulted magazines. The buttressed walls were preserved to the height of the first storey roof, and were pierced by a row of arrow slots, originally manned by archers standing on the first floor. The third building of the complex was a free-standing columned hall, 15 × 30 metres, its roof supported by three rows of four columns. Beyond was the complex known as the Old Western Building which may have been an earlier temple.

The last site of the trio, Godin Tepe (pl. 21), is the least well preserved, though an impressive fortification wall with bastions and arrow slots can still be seen running along the top of the citadel mound much as it must have appeared to the Assyrian soldier in the 7th century BC. Beyond are the ground plans of three columned halls, one with seven rows of six columns recalling Palace P at Pasargadae. The Assyrians returned home from their forays to carve Median fortresses with their towers and ascending tiers of roofs and battlements on the stone orthostats that lined their palace walls. From these reliefs, and the data provided by excavations it has been possible to reconstruct the external appearance of these buildings in their prime.



19. The interior of the fire Temple at Nūsh-i Jān.



20. East end of the sanctuary of the Central Temple seen from behind the fire altar, Tepe Nūsh-i Jān.

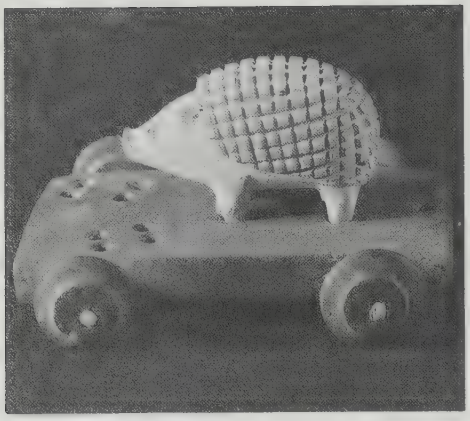
SCULPTURE

As noted, in ancient Persia as elsewhere, the earliest sculpture in the round consisted of small clay models of animals and pregant women – the products of early nature and fertility cults. The 'mother godesses' range in style from the semi-naturalistic with enormous breasts and buttocks, to the almost totally schematic. Several, like the fascinating soapstone example from Tepe Yaḥyā (see pl. 1) have phallic overtones. When viewed from the top, this somewhat underendowed woman looks like a male penis!

With the rise of civilisation at the end of the fourth millennium sculpture becomes more



21. Godin Tepe.



22. Hedgehog from Susa, Museé du Louvre, Paris.

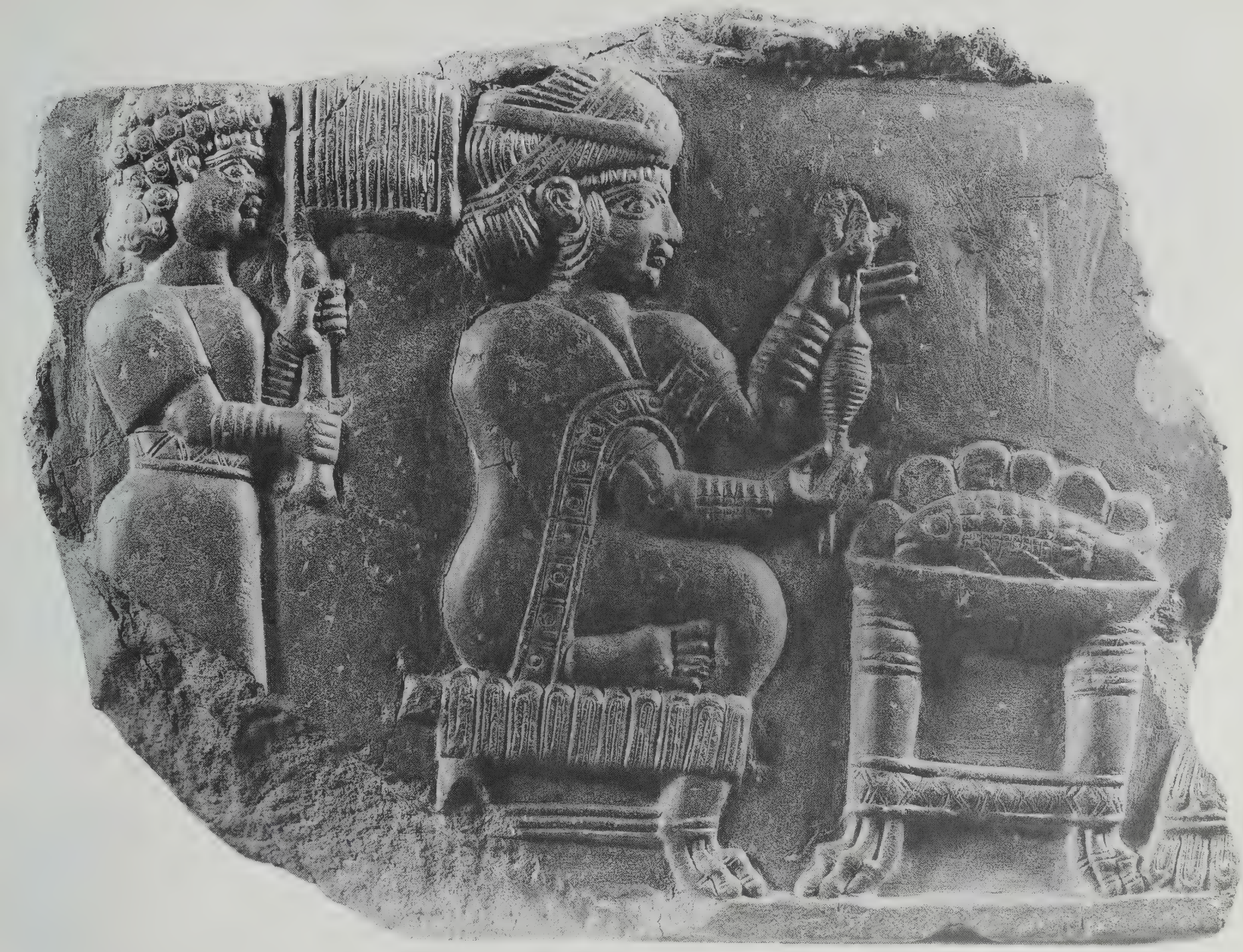


23. Rock relief, probably King Anubanini at Sar-i Pul-i Zuhāb, 21st–20th century BC.

adventurous. Archaic deposits at Susa, *c.*3000–2900 BC have produced an amusing collection of alabaster zoomorphic vases in the shape of birds, frogs, pigs and monkeys.[15] The same gentle humour appears in some of the early cylinder seals, where animals perform human functions on some prehistoric Animal Farm.[16] 12th-century foundation deposits from Susa include such delightful items as a lion and a hedgehog on wheels (pl. 22), and a bull-headed pendant delicately carved in lapis lazuli.[17] The glazed pottery bull that used to guard the entrance to Chogha Zanbīl, which was destroyed, is perhaps the best surviving example of this genre.

A second theme in early Elamite art is its preoccupation with demons – particularly nature demons, half man and half animal, or two animals fused together, like the griffon with an eagle's head and wings and lion's body. Carvings on cylinder seals and steatite vases illustrate a number of weird monsters: lion-headed demons overcoming bulls, bull-headed demons vanquishing lions, men with the head, feet and wings of vultures, and a god, who may have been native to Luristān, crowned like some pre-classical Pan with moufflon or ibex horns. Individual demons are sometimes carved in the round like the famous proto-Elamite lioness, but on seals and steatite vases they form unholy trinities with a demon or 'master of animals' in the centre and dependent beasts either side.[18] Similar scenes are very popular on the seals of Early Dynastic Mesopotamia but tend to become less important as time goes on and the country becomes steadily more urbanised and remote from its pastoral beginnings. In Iran they never go out of fashion and have a veritable renaissance in the first millennium BC. Still Elam beyond Khūzistān was never properly urbanised and the mountains and forests with their demonic inhabitants were easily visible from Susa itself.

Apart from its natural sources of inspiration, Elamite art tended to ape that of Mesopotamia, but without the feeling for the dignity and majesty of civil power, seen for instance in the statues of Gudea of Lagash or the Assyrian kings. Elamite figure work, whether in stone, metal or clay, tends to be solid and unimaginative, and this is nowhere more apparent than on the rock reliefs, which have had an influence on the art of later periods out of all proportion to their own merits. The earliest, and in many ways the most successful, are those of Anubanini, King of the Lullubi, at Sar-i Pul-i Zuhāb, marking the limits of his territory where the great Khurāsān road from central Iraq enters the mountains. The reliefs which date to around 2000 BC have a strong propaganda motif. In the most famous, Anubanini stands with a foot on a defeated enemy while Inanna floats before him holding the ring of sovereignty in one hand while with the other she grips two captives. Six more naked wretches march to their fate below (pl. 23). The iconography was taken up in later



periods, most noticeably by Darius in his great inscription at Bīsitūn further east on the same road, and perhaps by the Sasanians in their investiture reliefs. Similarly, the massed rows of worshippers carved on the rocks of Qul-i Fara near Īzeh (pl. 24), may have had some influence on the staircase reliefs at Persepolis. These Neo-Elamite reliefs are extremely crude, and like the Middle Elamite enthronement scene at Kurangun (pl. 26), badly weathered. To get a fairer idea of what the Elamite sculptors were capable of producing, one must look at the fragments of broken stelae from the Susa acropolis – for instance the delightful study of the Elamite woman at home which lovingly portrays details of furniture, costume and jewellery, and the different hairstyles and physiognomy of the mistress of the house and her negroid slave (pl. 25).

The same interest in personal details is displayed in the most outstanding examples of Elamite three-dimensional art – the portrait heads found in the early second millennium tombs at Susa (pl. 27). These heads may, like Egyptian tomb statues, have had a semi-mystical purpose – to preserve the persona of a dead individual after the body had decayed. Two fine examples, a man and a woman, were also found in the temple workshops at Haft Tepe. Each head was carefully modelled in clay and painted. Only the eyes were mass produced and stuck in separately. The men tend to have their hair cut *en brosse* with short back and sides but swept forward to a peak in front. They can be either bearded or clean shaven and several have weak chins and look hen pecked! The women are all of a type, plump, matronly and self-assured, with elaborately braided hair, and a faint archaic smile playing over their features. After studying these portraits one is not surprised to learn that

25. Elamite Lady spinning from Susa, Musée du Louvre, Paris.

24. (*facing page*) Procession of hundred worshippers, with perhaps King Kanni, Kul-i Farāḥ III (Izeh).

26. Middle Elamite enthronment scene, Kurangun.





27. Bust of Elamite man from Susa, *c.* 1500 BC Musée du Louvre, Paris.

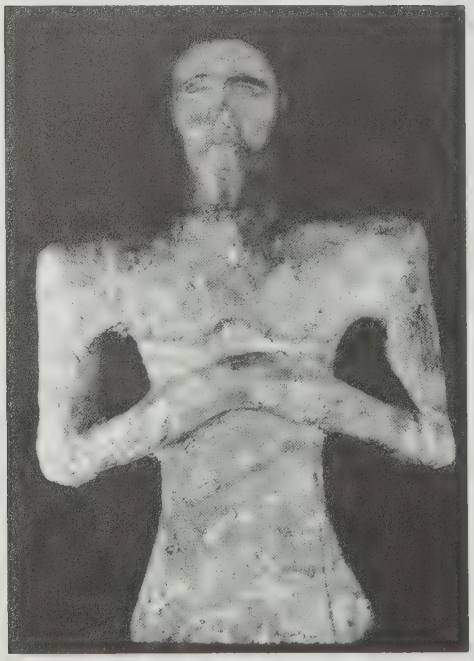
Elamite society was in part matriarchal and that Elamite women were held in high regard, legally and socially.

Three fine and totally unexpected portrait 'busts' also turned up in third millennium tombs at Shāhdād, an isolated trading site on the edge of the Dasht-i Lūṭ (pl. 28). The site has produced its own provincial art forms, including some magnificent seals.

METALWORK

Little survives of the bronze wall-reliefs, statues and great bronze vessels that once adorned the shrines of Susa. Even the solid life-sized statue of Untash GAL's queen, Napir Asu, lacks a head. There are however other sources for Elamite metalwork – chance finds in fields and ancient graveyards. These come by devious means into the hands of dealers and so to museums and private collectors. Objects that come on the market in this indirect fashion must always be treated with caution for their exact find spot, date and even authenticity are all open to question. Casts can be made of ancient metalwork, and corrosion can easily be faked! But since much that is best in Persian prehistoric art has been found in this fashion, it cannot be ignored.

28. Clay male bust from Shāhdād.



One of the most outstanding of these chance finds is the extraordinary statuette of a bull or cow with the body of a human being, wrapped in a spotted sarong.[20] It kneels and holds out a spouted silver vase (pl. 29). Similar kneeling figures of cattle-demons occur on Proto-Elamite seals and little stone carvings of kneeling worshippers with vases turn up in Proto-Elamite Susa. The pose is also characteristic of Iron II rhytons (drinking vessel in the form of a horn, usually ending in an animal's head). If the statuette is a forgery it is a remarkably intelligent one.

Also unique is the silver vase apparently dug up in a field near Persepolis showing two representations of a goddess garbed in a long fleeced robe typical of Early Dynastic figures from Mesopotamia. The delicacy and refinement of the work has led the authenticity of the vase to be seriously questioned. Its vindication probably lies in the Linear-Elamite inscription around the rim which some claim to be able to decipher. For those like myself unable to follow the linguistic arguments, it contains the perfect form of a sign (the rising sun) which had indeed been found on one other linear-Elamite inscription, but in a carelessly drawn form which had been mis-read and so gone unrecognised.[21]

The reign of Shilhak Inshushinak in the mid-12th century BC probably marked the high point of Elamite metalworking. On the Acropolis of Susa the skill of his gold and silversmiths is attested by foundation deposits containing small votive statues, rings embellished by minute granulation, and by a magnificent whetstone with a handle shaped like the head of a lion (pl. 30). Sheet metal plaques embossed with military scenes sheathed the walls of the temples which housed bronze statues not only of the gods but of all the royal family.



29. Silver bull figurine *c.* 3000 BC, Metropolitan Museum of Art, New York Joseph Pulitzer Bequest, 1966.

30. Whetstone with a golden lion headed fenial, from Susa *c.* 1500 BC, Musée du Louvre, Paris.



Ceremonial weapons were distinguished by the addition of zoomorphic decoration sometimes bordering on the fantastic. For instance a votive axe had its blade emerging from the gape of a single-horned monster whose neck sprouted a vulture's head.[22]

The decline of Elam, followed by the collapse a few generations later of Babylon and Assyria, left the way clear for the local chieftains in the Alburz and Zagros mountains, many of whom by now had absorbed Iranian culture. A warrior-like aristocracy, embracing, as

31. Gold cup with four gazelles, south-west Caspian region *c.* 1000 BC. Metropolitan Museum of Art, New York Rogers Fund, 1962.





33. Embossed pin head, Luristān, Brussels.



34. Pin head Luristān, Brussels.



35. Pin head Luristān, Brussels.

in medieval Europe, those who could afford a horse and weapons, lorded it over the local peasantry. These warrior chiefs must have been able to control the sources of metal ore in the interior and command the allegiance of the Elamite smiths. The sons and grandsons of those who had worked for kings now turned to less sophisticated masters and produced weapons, jewellery and horse trappings of astonishing variety and, in the north, elaborate drinking vessels which one can imagine being passed around from hand to hand at gargantuan feasts in the new high-columned halls.

On his death a chief's treasures were buried with his so that he could continue to use them in the hereafter. Most of the richest cemeteries have been dug up in secret by dealers, presenting the usual problems for archaeologists trying to study the finds scientifically. It is now clear, however, that in different areas, local styles developed. In the Alborz foothills, properly conducted excavations at Marlik Tepe, Kaluruz and round Dailamān have thrown



32. Golden cup with two lions' heads, Kalārdasht 900 BC.

light on collections vaguely attributed by dealers to the Amlash region. The royal tombs of Marlik, which probably span several hundred years during Iron Age I and II, have produced an impressive array of rhytons, weapons and jewellery but are revered particularly for the large number of gold and silver vessels they contain, three of which are reproduced here.

Technically they are outstanding, each being raised from a single sheet of metal with such skill that in one of the vessels (pl. 31), the protruding gazelle heads are hammered out of the side of the vase instead of being manufactured separately and then rivetted or soldered on, as is the case with the lionheads of other cups of this genre from Kalardasht (pl. 32). The vessels must have been made by artists whose techniques varied considerably – they could have been brought back as plunder from different regions.

Another vessel, is decorated with god figures. It shows two-headed demons dangling a sphinx from either hand (pl. 38). Although the chiefs who commissioned the vessels may have been Iranian,[23] the designs are all recognisably within the conventional Elamite repertoire.[24]

Further south in Kurdistān, Assyrian influence is dominant in the gold and silver work and the ivories of Hasanlu IV[25] and Ziwiyeh (see Chapter 11, pl. 4), though the latter also contains Scythian and Urartian elements. The famous gold bowl of Hasanlu, found in the wreckage of Level IV, is thought to have been made several centuries earlier when Hurrian influence was strong in the region, for the iconography is neither Assyrian nor Elamite, and it has been plausibly argued that it tells the story of the fight between the Hurrian god, Kummarbi and his rival the storm god, Teshub.[26] The figure work, though vigorous and fascinating in its detail, lacks elegance and the various scenes are scattered over the surface of the vase like confetti instead of being carefully arranged to enhance the shape of the vessel as is the case with the best of the Marlik vases (pl. 39).

The most bizarre school of Persian metalwork however, flourished in Luristān. Illicit excavators have been even more destructive here than in the Amlash region, and in the absence of proper archaeological data, the theorists have had a field day. In the last fifteen years however, several new excavations together with new and painstaking analyses of the available data have at last produced some generally accepted conclusions.[27]

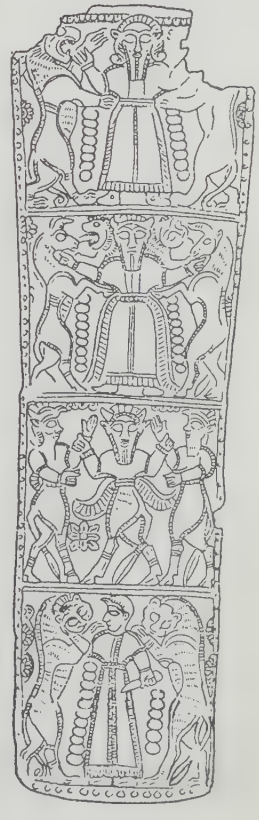
It seems clear, for instance, that attempts to make any one ethnic group or kingdom – Kassites, Cimmerians or some other unidentified Iranian tribe – responsible for making all the bronzes, are doomed to failure. Bronzeworking was established from very early times and bronze tools and weapons were deposited in stone tombs from the third millennium onwards. But the most elaborate bronzes – those unique to the province and not found elsewhere in western Asia – date to the Iron Age, and in particular to the first few centuries of the first millennium. During this period there were different ethnic and cultural groups operating in the province separated by the parallel chains of mountains that run in a north-west south-easterly direction through the area. Pottery is usually considered to be a more reliable indication of cultural affinities than metalwork, and the coarse buff wares found in the Pusht-i Kūh cemeteries in the south-west are quite different to the finer painted wares of Bābā Jān which is further north-east. First-millennium Assyrian campaign records suggest that the province may have formed part of the kingdom of Ellipi with Kassites in the mountains on the western fringe, Elamite influence dominating the centre and south around the temple of Dum Surkh, and the Medes around Bābā Jān in the north-east. But efforts to assign a particular bronze to a particular area are bedevilled by the fact that transhumance probably took place in ancient times as it does today, and bronzes were carried back and forth across the mountains both by ancient nomads and their modern counterparts who rediscovered them.

Two types of bronze are unique to the area. The first are sheet metal pin-heads, some with a large central boss (pls. 33–5), quivers (pls. 36–7) and metal vessels, all decorated with a mass of lively little figures in a distinctive local style. The scenes seem to be variations on traditional Elamite themes of unholy trinities, masters of animals, animals and sacred trees and demons. Moreover, the human faces are often caricatures of the faces seen earlier in the Elamite tombs with huge noses and strange chins – and some of their descendents are walking around the province today! But some of the themes appear to be new and it is argued that they are culled from Iranian mythology, newly introduced into the area. In particular a man with a pair of animal or human heads springing from his shoulders is said to be Zurvan giving birth to Ahurā Mazdā and Ahriman; the face on the central bosses of the pins is equated with Mithra the sun god, and the little men waving branches are magi with the barsom.[28]

A similar iconography must lie behind the other unique group of bronzes, the cast metal 'standard finials' (ornament) (pl. 40), pin-heads and cheek-pieces for bits (pl. 41). These were cast by the *cire perdu* method and the shape of the little rolls of wax forming eyes, hair or animals' tails, is highly characteristic. So too is the fantastic imagination of the smiths. In



36. Quiver plaque decoration, 1300–1100 BC, Luristān, formerly in the Barbier Collection.



37. Quiver plaque decoration, Luristān, in the Heeramaneck Collection.



38. Gold cup with two-headed demons, Amlash, 900–800 BC.

39. Gold Bowl, Hasanlu.

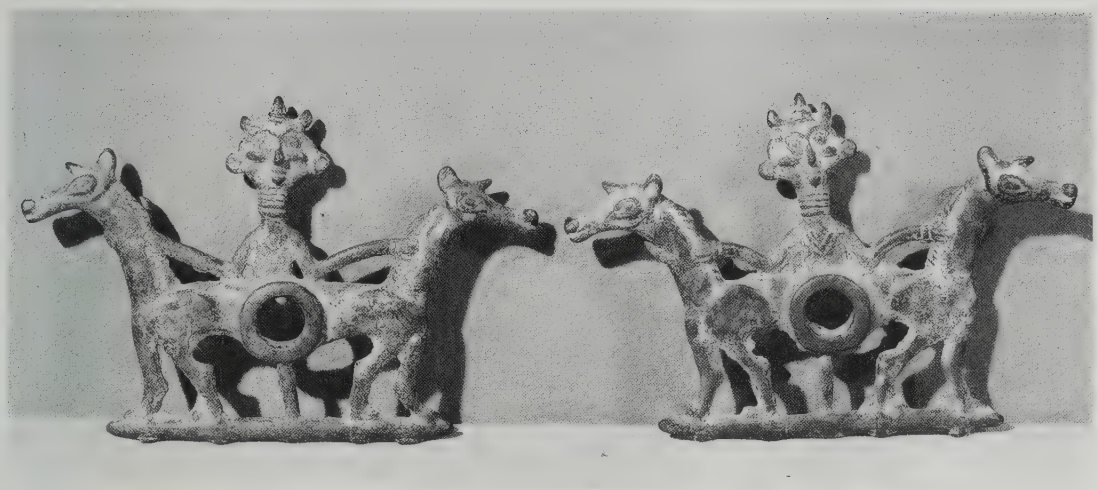


40. 'Idol', Master of Animals, Luristān, Brussels.



the example in pl. 42, the central master of animals has three superimposed heads facing in both directions like Janus; cocks' heads sprout from below the neck of the lowest head; there is no torso and the legs are bestial. This particular example from the cemetery at Tatulban can be securely dated to the 8th century BC.[29] The *idea* of a ceremonial standard finial goes back to the end of the second millennium where simple ones in the shape of opposed caprids (goat-forms) were found in an earlier cemetery at Bard-i Bal. The same graves also contained a small head, like those on the later finials, whetstone handles in the shape of goats, and typically Elamite swords and spoke-butted axes.[30]. In other words Luristān bronzesmiths were beginning to develop their characteristic repertoire before the arrival of Iranians *en masse* into the area.

This seems to have been the crux of the matter. Although Median tribes south of Harsin undoubtedly patronised the bronzesmiths and deposited exotic standard finials in their tombs, they do not seem to have invented the genre, merely to have adapted it to their own uses. The extraordinary range of motifs may owe something to Iranian mythology, but most of them are traditional, foreshadowed by such objects as the extraordinary votive axe from Susa with a vulture's head emerging from the neck of a dragon and would crop up again in the plateau. What we seem to have in Luristān is the last prehistoric manifestation



41. Horse cheek pieces, Luristān, Brussels.

of the Elamite genius for taking an animal form and then playing with it until it is reduced to a decorative abstraction – a trait seen three thousand years earlier in Late Chalcolithic pottery and now carried to its ultimate conclusion.

In a survey of this length covering over 6000 years it is impossible to deal with every aspect of art at all periods. Much that is important has been left out – for instance, the art to the north-west with its Anatolian derived cultures of the Bronze Age and its Urartian sites of the early first millennium and the art of the cultures to the east and their links with south Russia, Afghanistan and India have not been treated. I have thought it best in the interests of clarity to concentrate on two themes: the art of the Elamites, the literate, civilised people who controlled the destinies of western and southern parts or the Iranian plateau until the first millennium BC; and the art of the Iranian tribes who succeeded them.

Since Elamite artists would seem to have worked for Iranian rulers, the art of the two groups is in some way interconnected, and similar or related themes tend to appear in both. At all periods the best art is inspired by nature – plants, animals and nature-demons – but the treatment of these themes is not necessarily naturalistic. Rather the artists sought to reduce natural objects to geometric symbols and subordinate them to a decorative scheme, whether on the side of a vase or handle of a weapon. Their figure work – death masks apart – was crude. There is nothing in the Iranian repertoire to parallel the wonderful naturalism or narrative skill of the Assyrian palace reliefs or painted frescos. This is the art of a mountain people who have never been properly urbanised, to whom war is a matter of raids, plunder and chivalry rather than conquest and imperial organisation, and it is pervaded by a lightness and sureness of touch reminiscent of the panther, ibex and moufflon from whom the artists derived so much of their inspiration.



42. 'Idol', Master of Animals from Tattulban, Chinan, Luristān, Brussels.

3 THE ART OF THE ACHAEMENIANS

INTRODUCTION

The Achaemenian empire lasted for more than two centuries from 550 to 330 BC. During this period the Persian kings ruled many different peoples: some of these had been civilised for millennia, while others were still in a state of primitive barbarism; some had well established traditions of art, while others seem to have had no representational art at all. This diversity within the Achaemenian empire means there are a variety of definitions which may be given to the term 'the art of the Achaemenians': art in the Achaemenian court style commissioned by the Great King or his court, any work of art in the Achaemenian court style whether made under royal patronage or not, or objects of any style made within the Achaemenian empire. In this chapter the first of these definitions will be taken: the beautiful objects in Achaemenian court style fund outside the Persian empire, such as those buried in tombs in the Crimea or in hoards in Bulgaria will not be considered nor will I discuss the local art styles of Egypt and western Turkey, nor the hybrid styles of Anatolia and the Levant.

Achaemenian court art is seen at its most characteristic at Persepolis in the palaces built by Darius I (521–486 BC) and his son Xerxes I (486–465 BC). It was created to satisfy the needs and desires of the rulers of the Persians, who before the conquests of Cyrus (559–530 BC), the founder of the Achaemenian empire, had been unused to the wealth and luxury attendant on world domination. In the first half of the sixth century BC when the Persians were still vassals of the Medes they appear to have had no artistic traditions, and so, when Cyrus and his successors built their palaces and commissioned works of art, they had to borrow from other traditions. The resulting amalgam of motifs and techniques forms a recognisable style in which individual elements can be isolated and traced back to their foreign sources but of which the whole is distinctively Achaemenian.

Achaemenian art is commonly divided into two phases: the first and earlier exemplified by the fragmentary ruins at Pasargadae, built by Cyrus, and the second and later by the palaces at Persepolis and Susa, constructed by Darius I and the later Achaemenian kings. Carl Nylander has called the first phase 'archaic' and the second phase 'classic', terms evocative of phases in the art of Europe. He continued:

> Pasargadae is the new residence of a king and a people who had risen fairly suddenly from a tribal obscurity to influence and dominion. Persepolis is the ritual and representative palatial city of a world-ruling empire of undisputed power and incomparable glory. Pasargadae is fresh and experimental, full of excitement and surprise, Persepolis darkly majestic and calmly classic, consummate to the verge of tedium.

Although such a distinction exists and Pasargadae does show differences from Persepolis, the existence of the two phases is not of general validity. The 'archaic' phase has been found only at Pasargadae, and perhaps at Burāzjān, and is just one stage in the development of the Persepolitan style, or more exactly one of the many ingredients which went to make up that style. Furthermore, the surviving monuments at Pasargadae are so poorly preserved and so varied that it is impossible to define a 'Pasargadaean' style; the reliefs at Pasargadae are in three different styles, one of them 'Persepolitan'; and the architecture is similar to that of Persepolis. Moreover, there is no furniture, metalwork, seals, dress, or jewellery which can specifically be called Pasargadaean rather than Persepolitan. On the other hand the Persepolitan style is found all over the empire, even though the remains at Persepolis outnumber by many times those from all other Achaemenian sites. It is thus reasonable, and indeed almost inevitable, that our discussion of Achaemenian art concentrates on Persepolis and uses Persepolis as the yardstick with which to compare other Achaemenian works of art.

The following pages will discuss the architecture, sculpture, and minor arts of the Achaemenian court. These different fields of art were closely related: almost all the surviving Achaemenian sculpture was used in the decoration of buildings, and much of our knowledge of Achaemenian furniture, jewellery, and dress comes from the examination of these same relief sculptures. Nevertheless, an attempt will be made to separate these different aspects and treat them in turn.

ARCHITECTURE

Nothing is known of pre-Achaemenian architecture in the province of Fārs, the homeland of the Achaemenian dynasty. The date the Indo-European tribe of the Persians entered southern Iran is disputed, but whenever it was no archaeological remains have been discovered belonging to the centuries before Cyrus commissioned his palaces at Pasargadae in the second half of the 6th century BC. It is possible that the early Persians were nomadic tribesmen living the insubstantial hide or cloth tents which would have left no trace in the archaeological record, but this was not the case with their contemporaries the Medes, who are thought to have entered the west of the Iranian Plateau at approximately the same time as the Persians. In the 8th and 7th centuries BC, the Medes built temples, fortresses and palaces out of mud-brick, and Median settlements at Tepe Nūsh-i Jān, Godin Tepe, and Bābā Jān Tepe have now been excavated (see Chapter 2). At these sites columned halls were an important feature of the architecture, perhaps derived from the earlier columned halls of north-west Iran like those at Hasanlu. These columned halls were adopted by the Persians and are the most characteristic element of Achaemenian architecture.

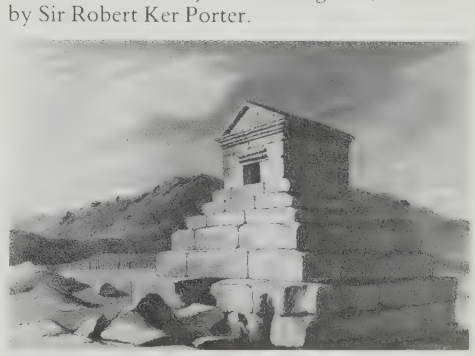
Pasargadae

The earliest Achaemenian buildings which have survived are those at Pasargadae, some two days' journey on horseback to the north of Persepolis. Here a huge terrace platform, a sacred precinct with two stepped stone plinths, an enigmatic stone tower called the Prison of Solomon (*Zindān-i Sulaymān*), a number of small columned buildings, and a gabled tomb are scattered over the plain. The disposition of these buildings has been compared to that of the tents of a nomad encampment, but a closer examination shows that, although the buildings are widely separated, they are by no means haphazardly placed in the plain but conform to an exact scheme carefully planned and executed. Clearly the architects and builders of these exquisite structures had had careful training and considerable experience. Studies of the stoneworking techniques suggest that the masons were brought from the Greek world, in all probability from the kingdom of Lydia which Cyrus conquered in 547 BC. Such techniques as anathyrosis, pryholes, clamps, the dressing of the stone, the mouldings on the tomb, the forms of the column bases, and of the column shafts are most closely paralleled in the Greek world and indeed were developed there. This Greek, or more correctly Lydian, influence extended further than merely techniques and tools, but how much further is disputed, especially in the absence of any documentary information or evidence from earlier buildings in Fārs.

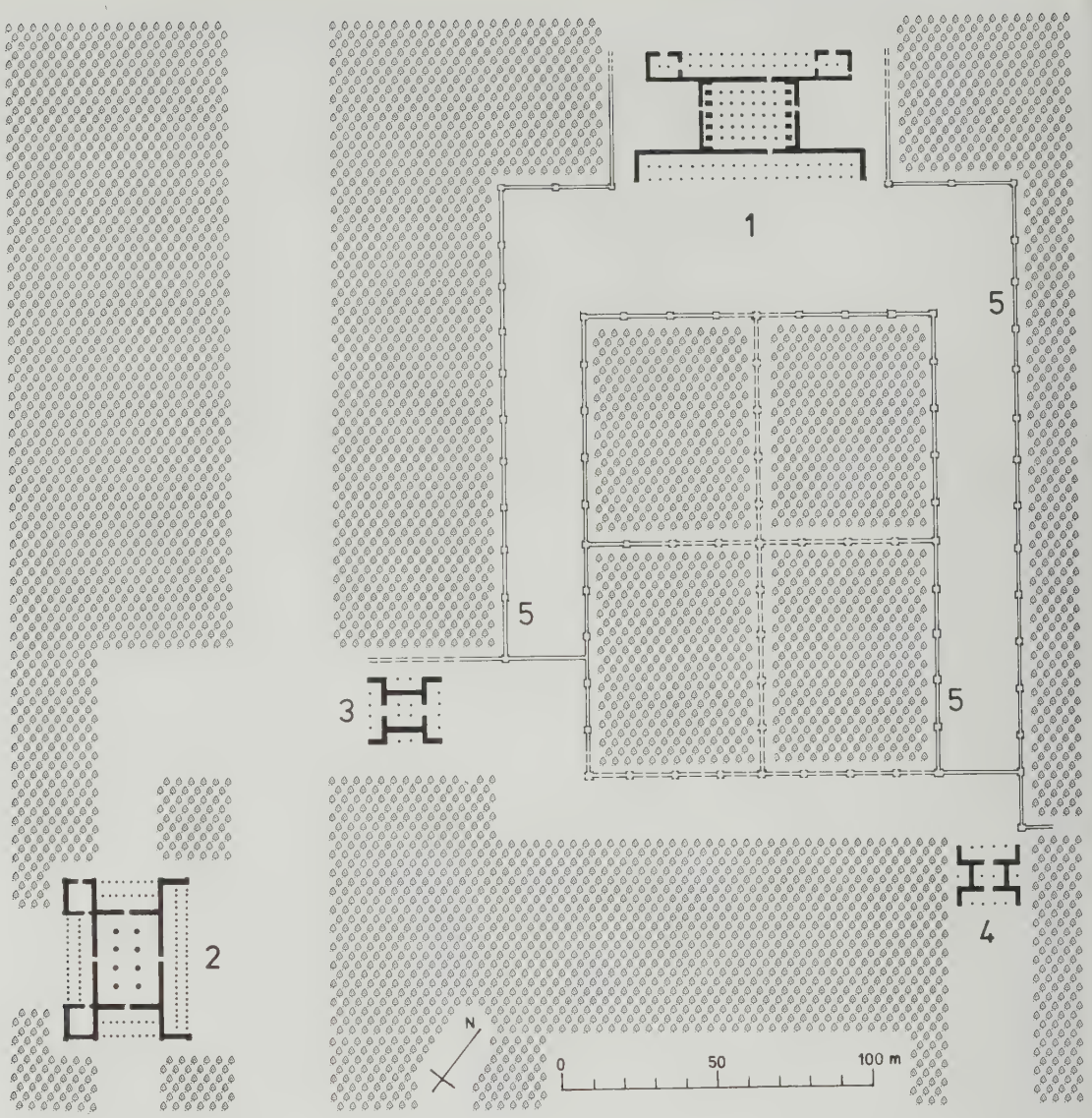
The most impressive of the structures at Pasargadae is the small gabled building set on a stepped plinth at the south-west of the site (pl. 1). There is general agreement among scholars that this was in fact the tomb of Cyrus the Great. According to classical authors it was set in the middle of gardens. The form of the tomb cella has similarities to tombs from south-west Turkey, but these were covered by earth mounds. The stepped platform on which the tomb chamber stands has been compared to the ziggurats of Mesopotamia, but the similarity is so general as to be of little value in understanding the inspiration of the design of the tomb of Cyrus. Whatever its origins the simplicity of the structure has a powerful effect on the viewer. Apart from the plain cyma mouldings below the roof and round the door the only decoration on the tomb is an elaborate rosette set high in the gable above the door, there is no surviving inscription on the building, but, according to Aristobulus, one of Alexander the Great's generals, there had been a short inscription: 'O man, I am Cyrus, who acquired the empire for the Persians and was king of Persia; grudge me not therefore my monument.' Even if these lines were an invention of the Greeks, this would surely have been a fitting epitaph for the charismatic Cyrus.

The palace area of the site lies about 1 kilometre north-east of Cyrus' Tomb. It is bisected by a wide canal, on the east of which is a gatehouse, Gate R, while on the west are two palace pavilions with columned porticos set in the midst of an extensive garden, of which the stone-lined water channels still survive (pl. 2).

1. The tomb of Cyrus at Pasargadae, drawn by Sir Robert Ker Porter.



2. Plan of the palace area and gardens at Pasargadae.



3. Reconstructed plan of Darius' Palace at Susa. Walls in outline are restored.
1. Apadana
2. Inner courtyard with throneroom to the south
3. Middle courtyard
4. Outer courtyard
5. Gatehouse

4. Plan of the citadel terrace at Persepolis.
1. Main Stairs; 2. Xerxes' Gate (Gateway of all Lands); 3. Northern fortification wall; 4. Unfinished Gate; 5. Apadana; 6. Hall of 100 Columns; 7. Darius Palace; 8. Palace G (Palace of Artaxerxes III); 9. Central Building (Tripylon); 10. Harem; 11. Palace of Artaxerxes I; 12. Xerxes' Palace; 13. Palace D; 14. Treasury; 15. Eastern fortification wall; 16. Original southern entrance.

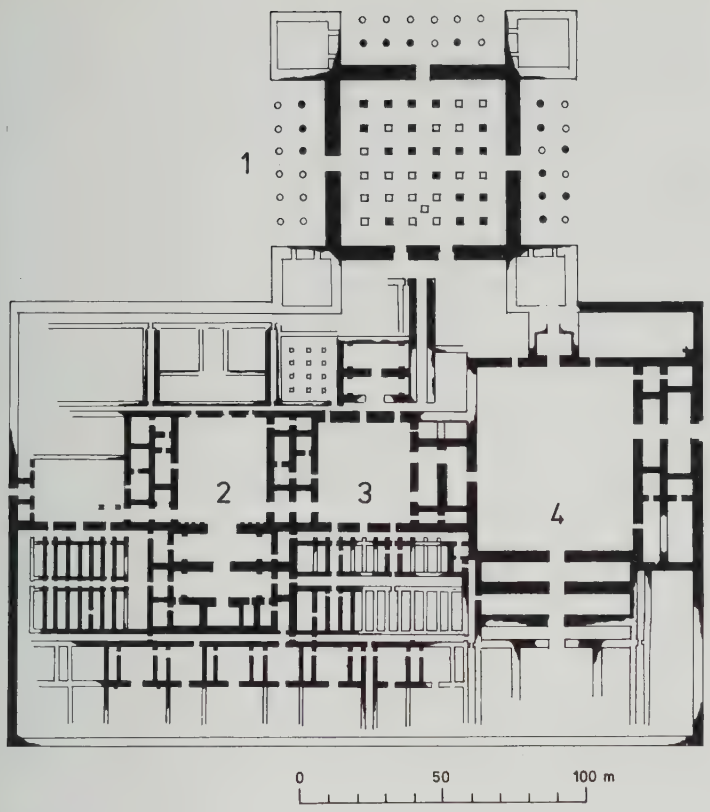
Much of the plan has been restored, especially that of the fortification walls.

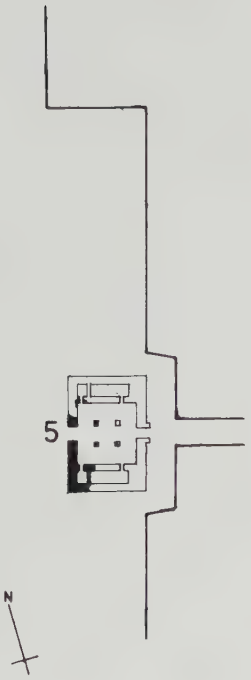
Buildings in blue were constructed *c.*500–490 BC, in green *c.*490–480 BC, in red *c.*480–460 BC, in brown *c.*460–400 BC and in orange *c.*358–338 BC. Much of the plan has been restored, especially that of the fortification walls.

The palaces and the gatehouse have central rectangular halls with flat roofs supported by stone columns. The floors are paved with stone and the lower parts of the walls were built of stone, while the upper parts were of sun-dried mud-brick. In each of these buildings there are doors in all four walls leading to the outside either directly or via a portico. This sort of free-standing building without a courtyard or a surrounding wall is alien to the architectural traditions of the ancient Near East, as also is the extensive use of finely dressed stonework. Columns, it is true, are a characteristic feature of the architecture of the first half of the first millennium BC in western Iran and in these cases too the buildings tend to be small, self-contained structures, but they are enclosed and are not outward looking.

For the architectural inspiration of these buildings one has to look outside Iran to Lydia. But, although in the East Greek temples one can find exact parallels for the stoneworking techniques and for some elements of the architectural decoration such as the form of the column bases and shafts, the designs are by no means copies: in particular by roofing the hall with timber beams the Achaemenian architect was able to make the columns much thinner and taller than was normal in Greece. Oddly, the closest parallels to the palaces at Pasargadae are the garden pavilions of Safavid Iṣfahān (see below Chapter 6), and it is tempting to believe that their function too was the same, as places for rest, recreation and summer feasting in the midst of shady and luxuriant gardens.

Cyrus' building programme at Pasargadae was never completed. It is probable that the upper drums of the columns of Palace P were finished in wood and plaster and the great terrace platform at the north of the site was abandoned with only half of the stones fully dressed, with the staircases incomplete, and with none of the buildings on the terrace started. Presumably Cyrus' death on the eastern frontier brought work to a halt, and Cyrus' son Cambyses was occupied with other matters during his reign.


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Darius I, who was not in the direct line of descent from Cyrus, chose to initiate his own building operations at new sites rather than to continue projects started by his predecessors. Early in his reign he ordered the building of a vast palace at Susa which was to serve as the administrative capital of the empire. Buried under the walls of the palace were stone foundation tablets, and in these Darius described in detail how the palace was constructed:

> This palace which I built at Susa, from afar its ornamentation was brought, downward the earth was dug, until I reached rock in the earth. When the excavation had been made, then rubble was packed down, some 40 cubits in depth, another (part) 20 cubits in depth. On that rubble the palace was constructed.
>
> And that the earth was dug downward, and that the rubble was packed down, and that the sun-dried brick was molded, the Babylonian people – it did (these tasks).
>
> The cedar timber, this – a mountain by name Lebanon – from there was brought. The Assyrian people, it brought it to Babylon; from Babylon, the Carians and Ionians brought it to Susa. The *yaka*-timber was brought from Gandara and from Carmania.
>
> The gold was brought from Sardis and from Bactria, which here was wrought. The precious stone lapis lazuli and carnelian which was wrought here, this was brought from Sogdiana. The precious stone turquoise, this was brought from Chorasmia, which was wrought here.
>
> The silver and ebony were brought from Egypt. The ornamentation with which the wall was adorned, that from Ionia was brought. The ivory which was wrought here, was brought from Ethiopia and from Sind and from Arachosia.
>
> The stone columns which were wrought here, a village by name Abiradu, in Elam – from there were brought. The artisans who wrought the stone, those were Ionians and Sardians.
>
> The goldsmiths who wrought the gold, those were Medes and Egyptians. The men who wrought the wood, those were Sardians and Egyptians. The men who wrought the baked brick, those were Babylonians. The men who adorned the wall, those were Medes and Egyptians.
>
> Saith Darius the King: At Susa a very excellent [work] was [brought to completion]. Me may Ahuramazda protect, and Hystaspes my father, and my country.

While this document is hardly a contractor's specification and is clearly propagandist in intention, it does show how the king thought it important to say that the construction of the palace was only achieved by importing labour and materials from all over the empire. This is confirmed by an examination of the remains of the palace itself (pl. 3). Three courtyards in the Babylonian tradition are combined with a large columned hall with three columned porticos, which seems to be a development of the columned halls of Pasargadae. The decoration in glazed brick and in stone also shows a combination of styles, Mesopotamian, Elamite, Greek, and Iranian. This borrowing from the subject peoples is particularly clearly seen in the statue of Darius found in the gatehouse of the palace.

Persepolis

Later in his reign, Darius decided to build a palace in the centre of the Persian homeland, on the eastern edge of the Marv Dasht plain. In the cuneiform inscriptions the site was known as Parsa, which was also the name of the country or province of Persia itself but the Greeks later called it Persepolis. The palace area at Persepolis has resisted the ravages of time far better than the Susa palace, partly because much of it was built of stone rather than the mud-brick of Susa and partly because Persepolis was abandoned after its sack by Alexander and was not used as a quarry by later inhabitants. According to Diodorus Siculus, Persepolis 'the capital of the Persian kingdom' was 'the richest city under the sun'. But of this great city only the palace area and the royal necropolis at Naqsh-i Rustam have survived. Such, however, is the wealth of the remains that Persepolis is the primary source of the art and architecture of the Achaemenian kings.

The palace area is divided into three parts: the citadel terrace itself, now called Takht-i Jamshīd, the Shāh Kūh or 'royal hill' above the terrace, and the buildings in the plain to the south and west of the terrace. The plan of the citadel terrace has now been almost completely recovered in excavations carried out by the Oriental Institute of Chicago and the

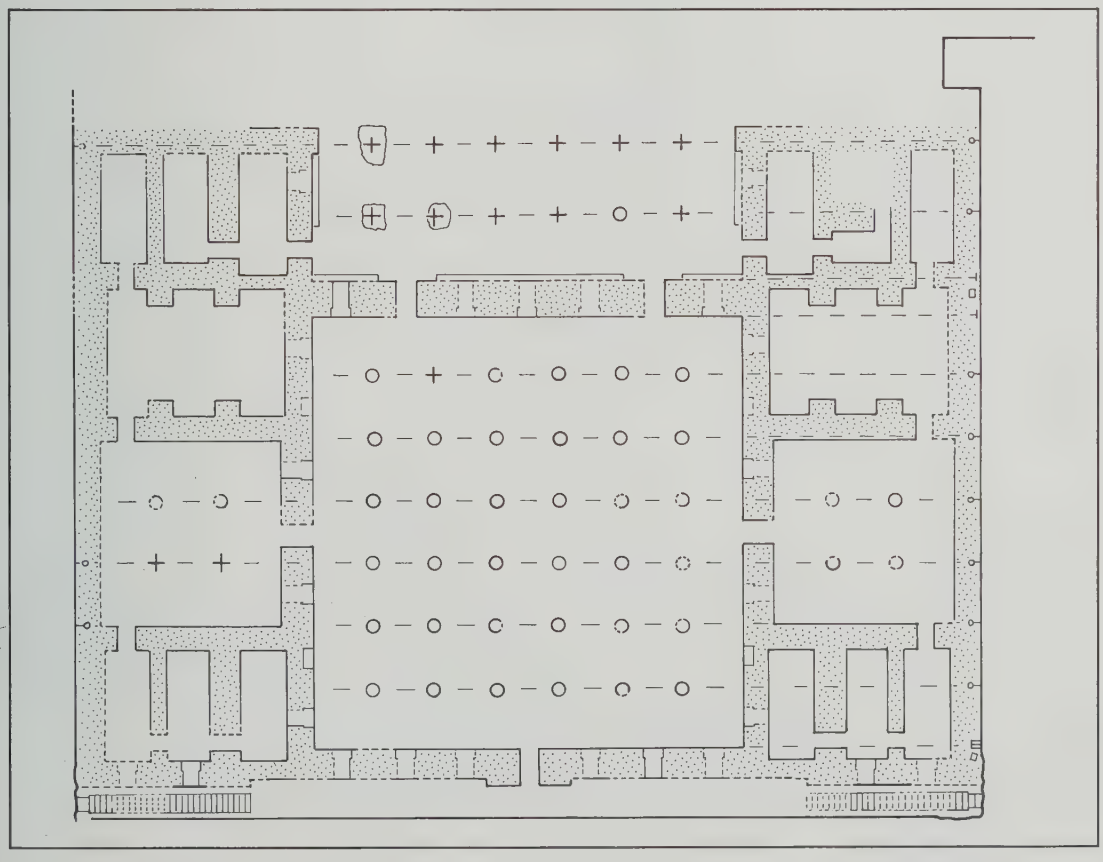
Archaeological Service of Iran (pl. 4). About a dozen single-storey buildings were constructed on the terrace platform. Some of these were built on their own stone platforms, and their door jambs, lintels, and window frames were made of carefully worked stone. Their walls were of mud-bricks, often with stone socles, and their roofs were supported on wooden or stone columns. Although none of the buildings have identical plans, most of them follow a similar layout, consisting of a central columned hall with a portico of two rows of columns at the front (pl. 5). There are either subsidiary rooms or columned porticos on the sides, and there are often further rooms at the back. Most of the palaces face north, but Darius' Palace and the Palace of Artaxerxes III face south, perhaps because they were intended for use in winter rather than summer.

An impression of the facade of an Achaemenian palace can be gained from the royal tombs (pl. 6). Four tombs were carved into the vertical cliff face of Naqsh-i Rustam about 6 kilometres north of the palace area and two more in the Shāh Kūh above the terrace. The upper parts of the tombs show scenes of the king worshipping in front of a fire altar, while the central registers show the columned facades and central doorways of an Achaemenian palace. The dimensions of the facade on Darius' tomb are almost exactly the same as those of Darius' Palace, suggesting that the facade on the tomb was copied from the palace.

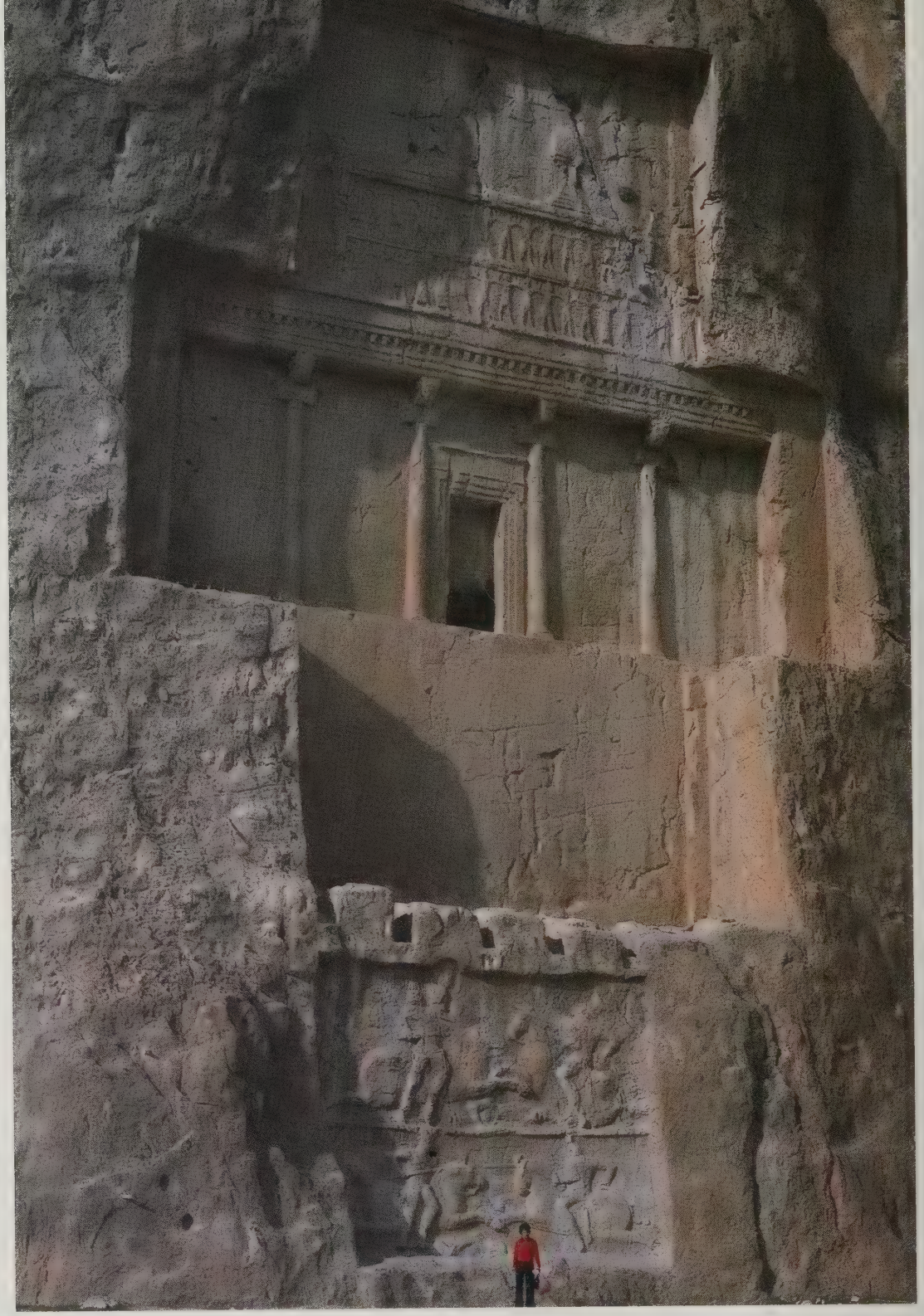
Each building was carefully designed, and it is probable that plans were drawn with the dimensions labelled in exact numbers of units. From marks on the platforms of Darius' and Xerxes' Palaces (pl. 5) and from measurements on the other buildings know that the units used were a cubit of roughly 52.1 centimetres, a foot of roughly 34.8 centimetres, and a palm of roughly 8.7 centimetres, in the ratio of 6:4:1, a system of measurement which may have been borrowed from Mesopotamia.

It was once thought that the overall design of the citadel had been established by Darius I and that later kings merely continued his scheme. More recent research, however, has shown that there were major alterations to Darius' original design. In particular the terrace was extended to the west, the east and west sides of the Apadana were remodelled, and the Treasury had three distinct building phases. The majority of the buildings on the terrace were constructed in the reigns of Darius I, his son Xerxes I, and his grandson Artaxerxes I. Thereafter, only minor additions were made during the reign of Artaxerxes III.

The debt owed by the Persians to other cultures is very evident in the architecture of Persepolis. The plans of the buildings are a development of those already used at Susa and Pasargadae, and their decoration shows the direct adoption of motifs from all over the empire. At first sight the borrowings appear haphazard: huge guardian winged bulls



5. Plan of the Palace of Xerxes, Persepolis, showing marks used to lay out the walls and columns.



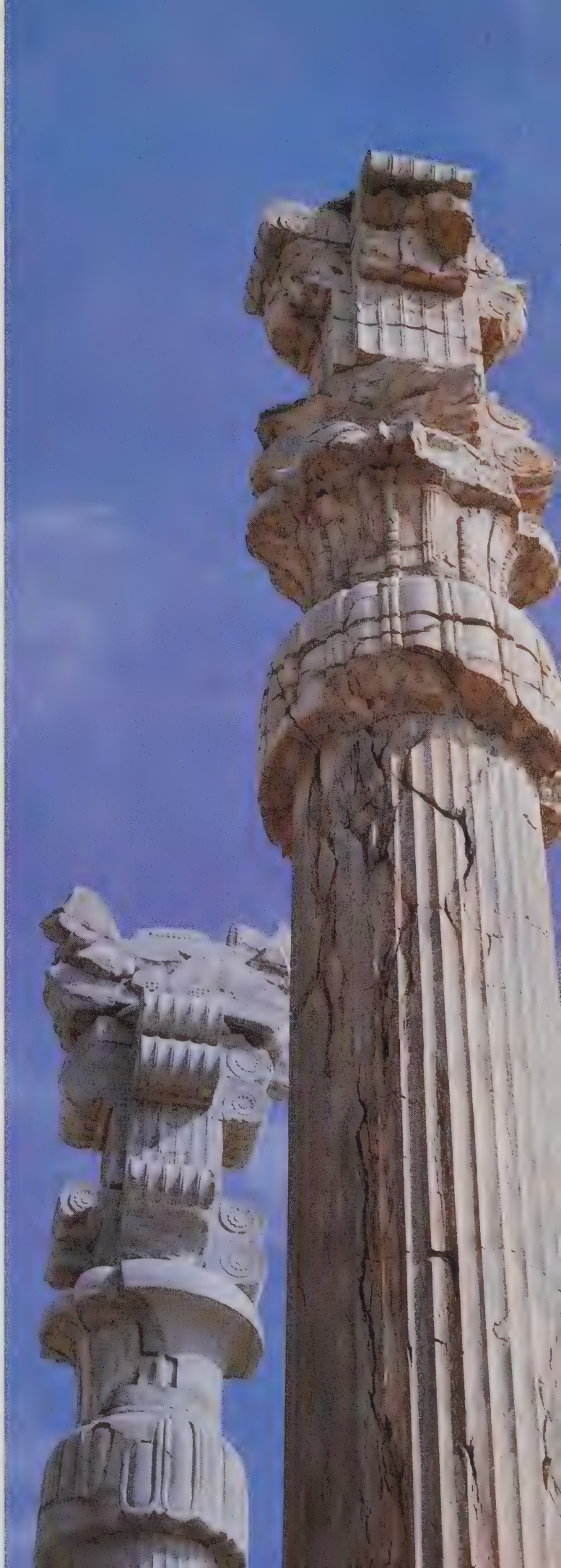
6. Tomb of Darius, Naqsh-i Rustam.

imitating Assyrian *lamassus* were carved on the door jambs of the Gate of All Lands (pl. 7), the lintel was a fluted Egyptian cavetto cornice, and this in turn was adorned with a bead and reel moulding which must have been taken from the Greek world. The columns of the massive halls have composite capitals with Egyptian inspired floral elements (pl. 8), Ionian inspired volutes, and double bull or lion protome impost blocks, which are one of the few features of Achaemenian architecture for which foreign forerunners have not been convincingly demonstrated. A closer examination, however, does suggest that there was some kind of logical scheme behind the choice. Clearly the assumption that there were no indigenous Persian artistic traditions satisfactorily explains why they borrowed from other cultures, and, as Herodotus wrote of them, 'no nation has been more receptive to admit foreign customs'. But perhaps more important is the attempt to create a suitably awesome and impressive setting for the king and his court, and this explains some of the architectural preferences and much of the iconography of the sculpture of the Achaemenian palaces.

7. Human-headed winged bull on Xerxes' Gate, Persepolis.

8. Two columns of Xerxes' Gate, Persepolis. The restored column in the background shows the composite capital made up of a floral element, double opposed volutes, and addorsed bull protomes on which the roof beams rested.







9. Four winged genius on a door jamb of Gate R at Pasargadae.

There are sculptures carved in low relief on the door jambs of the palace pavilions at Pasargadae. The best preserved is that of a four-winged genius on one of the side doors of Gate R. The basic inspiration for this figure seems to be Mesopotamian, where four-winged genii were commonly represented on the doors and walls of Assyrian palaces, but in the example at Pasargadae the figure wears a headdress clearly derived from the Egyptian *hemhemet* crown and a dress similar to that worn by earlier Elamite rulers (pl. 9). The other reliefs in this building, the huge guardian bulls on the main doors, and those on the doors of Palace S, bull-men, fish-men, eagle-footed genii, and human-footed genii, all have close Assyrian parallels. The reliefs of the king and a servant on the doors of Palace P, however, are much closer in style to the reliefs found at Susa and Persepolis, and for this reason many scholars have suggested that they were added in the reign of Darius.

The earliest sculpture of Darius' reign is his victory relief carved on the cliff of Bīsitūn. Here a lifesize figure of Darius is shown triumphing over the pretenders who rebelled after the death of Cambyses, while the god Ahurā Mazdā hovers above in a winged disc. The two principal stages in the carving of the relief can be dated fairly accurately. The main part was carved after the end of November 521 BC, the date of the latest event mentioned in Columns I to IV of the accompanying inscription, while the figure of the Scythian chief Skunkha and Column V of the Old Persian inscription were added after 519 BC.

The idea for the scene may have derived from the much earlier relief of Anubanini carved near Sar-i Pul-i Zuhāb, 150 kilometres further west along the road to Babylon. The sculpture, though not yet in the fully developed Persepolitan style, shows many similarities to the Persepolis reliefs, but it has even closer links with the Assyrian reliefs as a comparison of the heads of Darius and the Assyrian king Ashurbanipal shows (pls. 10 and 11).

The first reliefs which are entirely in the fully developed Achaemenian court style are those in glazed brick from Susa (pls. 12 and 13). 'Susian' guards, Persian and Median servants, winged discs, human-headed winged lion-bodied sphinxes, the design of the lion attacking a bull, walking lions, and many decorative motifs, rosettes, palmettes, reeds, etc., are found at Persepolis and at Susa in almost identical forms. The main differences between the sculptures at the two sites are the materials – stone at Persepolis and glazed brick at Susa – and the fact that, while at Persepolis the king is the centre of almost every scene, he is not shown at all on the reliefs at Susa. By far the greatest quantity of relief sculpture in the Achaemenian court style is found at Persepolis where more than three thousand figures were carved on the facades, staircases, door jambs, and tombs. A few other examples have, however, been found at Hakavan in Fārs, at Babylon, and on the Canal Stelae from Egypt.



10. (*left*) Drawing of the head of Darius at Bīsitūn.

11. (*right*) Drawing of the head of Ashurbanipal on a relief from Nineveh.



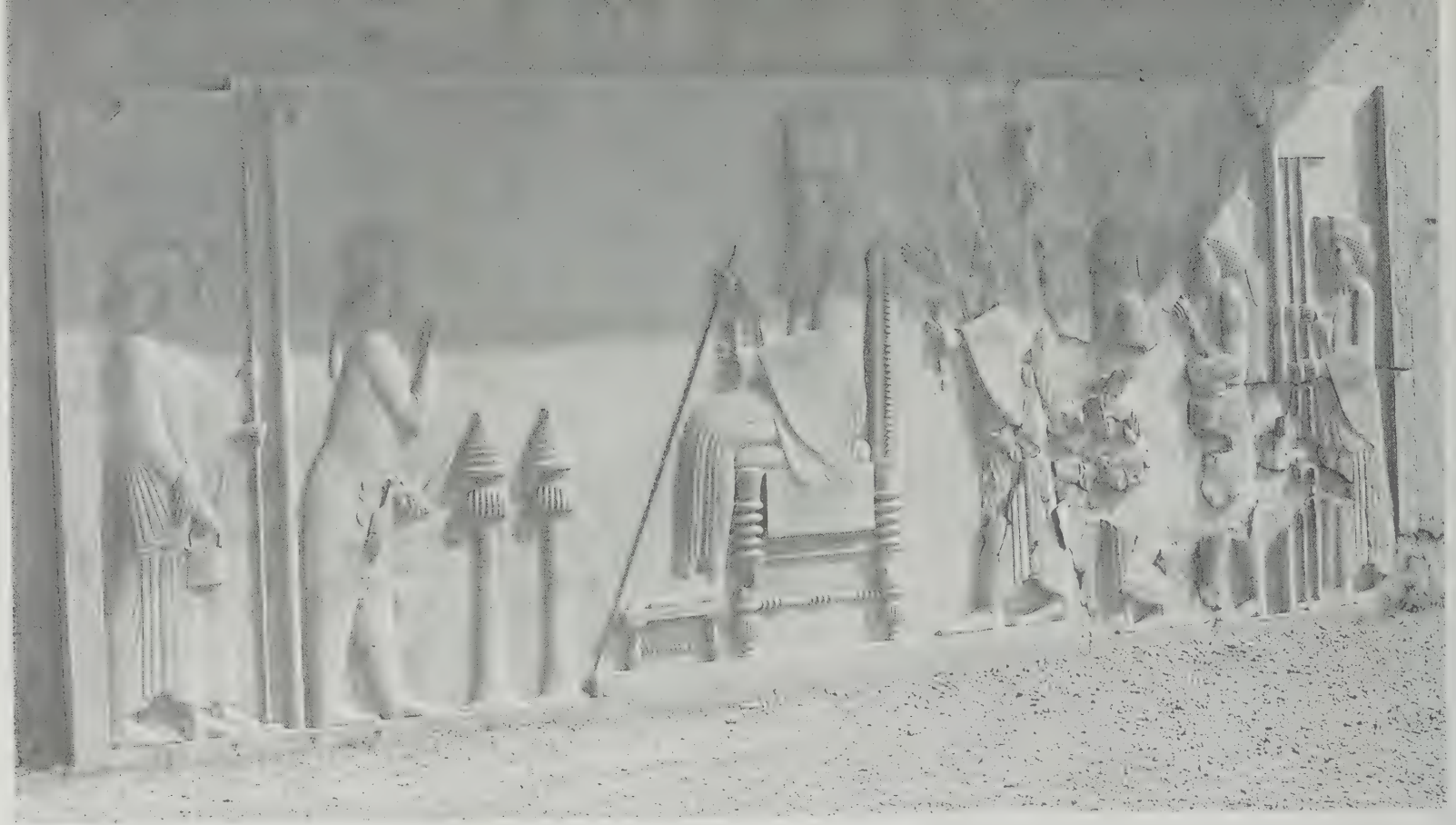
Glazed brick relief of a Persian
ard from Susa.

Glazed brick relief of a winged
rned lion from Susa.



. (*facing page*) The
ng under his parasol
the south door of the
entral Building,
rsepolis.





15. The king in audience: originally in the centre of the east side of the Apadana, Persepolis.

17–21. Reliefs on the East side of the Apadana, Persepolis.

16. Subject peoples (delegations XIII–XVIII) on the East side of the Apadana, Persepolis.

A visitor to Persepolis today sees only the skeleton of the ancient palaces for only the stones remain: the mud-brick walls, the timber doors and ceilings, and the rich fabrics and carpets have been destroyed; and so we tend to overemphasise the importance of the fine stonework. The reliefs for the most part are fairly small-scale and, carved on the lower parts of the walls, they would have been dwarfed by the soaring height of the buildings. Nevertheless, since it is all we have, the relief sculptures have great importance, not only as works of art in their own right but also as documents of the ceremonial, dress, composition, and milieu of the Achaemenian court.

As has been noted, the king is the focus of almost every scene at Persepolis: he is seen on the tombs in an attitude of worship before the sacred fire in the presence of Ahurā Mazdā, who is represented as a human figure in a winged disc; on the doors he is shown in procession underneath the royal parasol (pl. 14); on the Apadana he was originally shown seated on his throne receiving in audience delegations of subject peoples from all over the empire (pl. 15). Elsewhere, even when the king is not shown, the scenes are concerned with the life of the king and depict his servants, his guards, or the nobles of his court (pls. 16–21). Although many of the reliefs depict actual secular activities of the king and his court, the divine authority, to which the king attributed his power, is not neglected, and in many scenes this is represented by the winged disc, either with or without a human figure, which hovers above the king. On the doors of some of the palaces the king or a royal hero is shown fighting and triumphing over a mythical beast, horned lion, winged bull, griffin, or the like (pl. 22).

The basic inspiration for these designs appears to have been Assyrian. Indeed every scene shown on the Achaemenian reliefs is to be found in an almost identical form on the Assyrian palace reliefs, except that of the king worshipping in front of a fire altar, which after all was not an Assyrian religious practice. Sometimes the similarity is so close that the two sets of reliefs appear to belong to a single tradition. For example at Til Barsip, an Assyrian provincial capital in Syria, there are paintings depicting the king in audience and, just as on the Treasury reliefs at Persepolis, the king is shown sitting on a high-backed throne placed on a low dais, resting his feet on a footstool and holding a staff and flower in his hands.

The Assyrian palaces, where the prototypes of the Achaemenian scenes are to be found, were captured and destroyed by a combined force of Medes and Babylonians in 612 BC. Thus at least a century had passed between the carving of the last Assyrian reliefs and the first reliefs at Persepolis. It is possible that the Assyrian craftsmen were deported and that the tradition of these Assyrian motifs was fostered by some intermediary, presumably either the Medes or the Babylonians. Nothing is known of the representational arts of the Medes as no royal Median site has yet been excavated, but it seems more probable that the Babylonians were the link between Assyrian and Achaemenian art. The few surviving Neo-Babylonian works of art, principally the glazed brick reliefs on the Processional Way and on the Ishtar Gate, show marked similarities to both Assyrian and Achaemenian stone and glazed brick reliefs.

In an important study Margaret Root has demonstrated how the Achaemenians adapted the schemata of the Assyrians to promote a particular image of their rule. For example, in the procession of subject peoples bringing gifts to the king the delegations consist of free men, unlike on the Assyrian reliefs where delegations consist of captives defeated in battle. This attitude of magnanimity and benevolence, about which we read in Herodotus' or Xenophon's descriptions of the rule of Cyrus may also be the reason why scenes of battle and retribution are avoided in Achaemenian art; but even if these were the ideals of the Persian monarchs, in reality they performed similar atrocities to earlier and later oriental rulers.

Even though the basic form and structure of the Persepolis reliefs were borrowed from Mesopotamia, Egyptian and Greek influences can also be observed. It has been suggested that other regions, Elam, Urartu, Scythia, Media, Phoenicia, and so on, played a part in the creation of the Achaemenian court style, but, if so, it was only a very minor part. Egyptian inspiration is seen above all in the winged disc with the outline of the wings and the form of the feathers, though sometimes examples are found in which it was combined with a human figure as in Assyria (pl. 25). Greek influence is most obvious in the ubiquitous treatment of the drapery. Some classical art historians have overemphasised the significance of these stylised overlapping pleats and central zigzag folds. While this motif certainly originated in the Greek world, it need only have been borrowed once in order to become part of the Achaemenian repertoire. There is also evidence of continuing influence from Greece in the techniques of stoneworking, for a new clamp type and a new tool, the toothed chisel or hammer, were introduced at Persepolis following similar developments in the Greek world. This does not, however, mean that all the masons and sculptors were Greeks. Indeed like the motifs used on the reliefs, the workmen were recruited from all over the empire, as Darius described in an inscription on the south wall of the terrace at Persepolis:



17. A 'Persian' and a 'Median' noble.

18. Head of a Parthian (delegation XV).

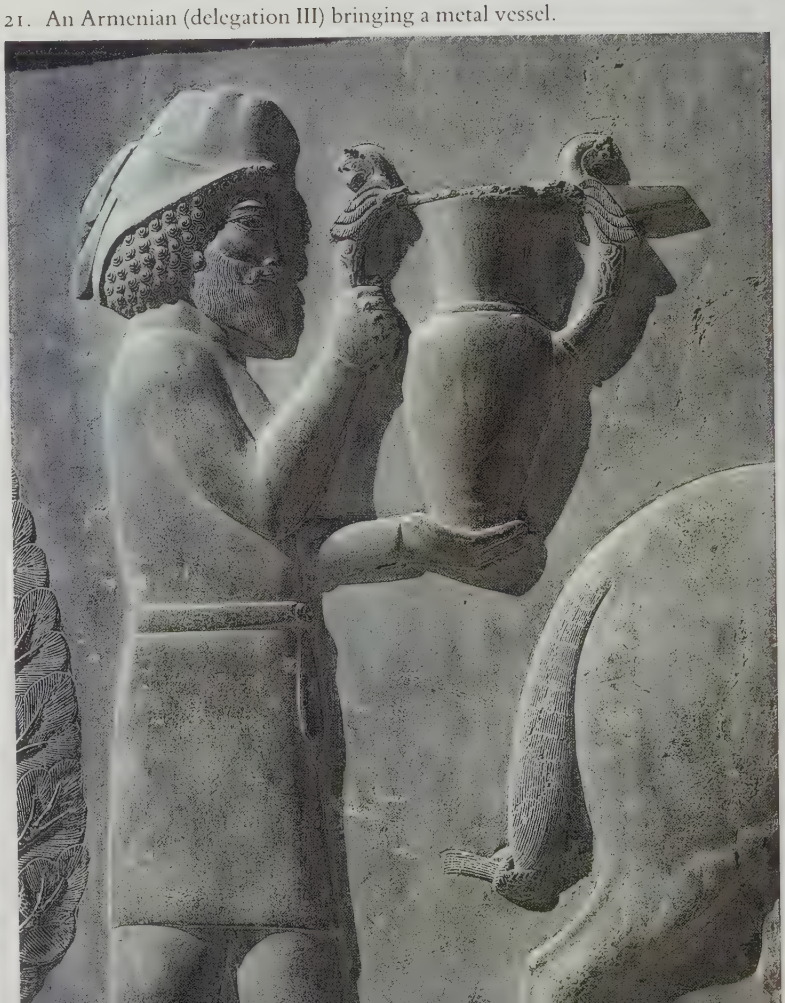


19. Royal guards.

20. A Lydian (delegation VI) bringing gold bracelets.



21. An Armenian (delegation III) bringing a metal vessel.





22. The 'royal hero' fighting a griffin on Darius Palace, Persepolis.

these are the lands, which did this which was done here: Persia, Media, and the other countries of other languages wherein are both mountains and plains on this side of the sea and on yonder side of the sea and also on this side of the desert and on yonder side of the desert land – just as I gave them command.

Darius' claim is corroborated by the tablets found in the Treasury, which record payments to foreign workers at Persepolis, including Egyptians, Carians, Syrians, and Babylonians.

The sculptors had no influence on the design. When the same scene was carved by different workmen, as on the north and east sides of the Apadana, the only major differences between the two versions are alterations necessitated by the change in direction of the figures. This was done by a combination of reflection, exchanging right for left as in a mirror, and of reversal, viewing the figure from the other side.

Minor differences between similar figures can be used to deduce which sculptors carved which figures. By a combination of mathematical cluster analysis and traditional visual analysis it has been shown that on the north wing of the east side of the Apadana the work was divided between two teams of sculptors, each of whom carved almost exactly the same number of figures. This conclusion is confirmed by the presence of sculptors' marks which delimit the work of each team. The division of work was so strict that in one case one team actually carved the front of one horse while the other carved the back.

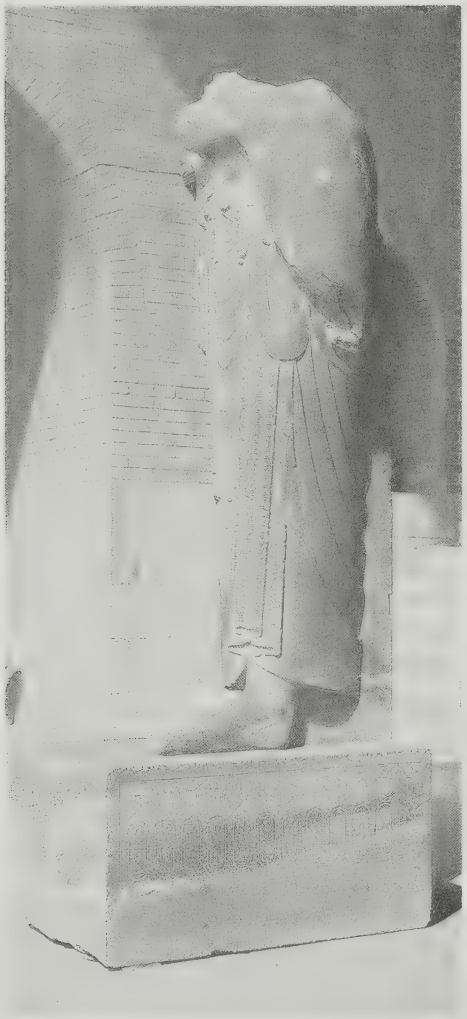
The sculptors' marks on the north side of the Apadana were the same as those on the east, but the sculptors of the subject delegations on the east carved the guards and nobles on the north and vice versa. Similar marks are also found amongst the masons' marks carved on column bases in the Treasury: this suggests that the sculptors were recruited from amongst the masons. According to the Treasury tablets, sculptors were paid similar salaries to other workers: they were not a highly paid, privileged elite amongst the workforce.

Stylistic Development

The main elements of the Achaemenian court style were determined during the reign of Darius, and late rulers followed the models established at Susa and Persepolis with few modifications. In the design of their tombs the later Achaemenians exactly copied that of Darius (though those above the terrace at Takht-i Jamshīd omitted the lower arm of the Greek cross). The scenes on the Apadana and on Darius Palace, both of which were started by Darius and completed by Xerxes, include almost all the scenes found on the reliefs of later rulers. Furthermore the details of iconography, physiognomy, styles of dress and composition remained virtually unchanged throughout the Achaemenian period.

The later reliefs do differ from the earlier in a few minor particulars. Some variations, such as the form of the eyebrow on the reliefs of Artaxerxes III, or the rounder modelling of the reliefs of Artaxerxes I, seem to represent the artistic preferences of the later sculptors. Others, such as the alteration in the shape of the king's crown, may reflect some real change which took place at the court.

23. The statue of Darius found at Susa.



Interpretation of the Reliefs

The inscriptions found at Persepolis give little information about the function of the palace area, but Diodorus described it as follows: 'Scattered about the royal terrace were residences of the king and members of the royal family as well as quarters for the great nobles, all luxuriously furnished, and buildings suitably made for guarding the royal treasure.' This emphasis on the role of the king is seen in the architecture and in the reliefs. As Lord Curzon wrote: 'Everything is devoted, with unashamed repetition, to a single purpose, viz the delineation of majesty in its most imperial guise, the pomp and panoply, of him who was well styled the Great King.'

In recent years the theory that Persepolis was built and used for the audience ceremonies which took place at *nau rūz*, the Persian New Year, has received wide support, but there is in fact no evidence that an annual festival was held at Persepolis or indeed that the Achaemenians ever celebrated *nau rūz*. It is simpler to think of the citadel of Persepolis as a royal residence and treasury built in the vicinity of the burial places of the kings.

The Statue of Darius

Little sculpture in the round has survived from the Achaemenian period. A number of animal statues have been found at Persepolis and Susa, but the only human statue is the colossal headless statue of Darius, unearthed at Susa in 1972 (pl. 23). This depicts the king in Persian dress in typical Persepolitan fashion. It is as if a bas-relief from Persepolis had been

transformed into three dimensions. Despite having these Persian features and having been found at Susa, the statue was in fact carved in Egypt, as is recorded in an inscription on the folds of the dress: 'This is the stone statue which Darius ordered to be made in Egypt so that in the future he who looked at it would know that the Persian man held Egypt.' While many features of the statue betray its Egyptian origin – the extensive hieroglyphic inscriptions, the Egyptian scenes on the front and back of the base, and the Egyptian-derived figures of the subject peoples on the sides of the base, as well as the back pillar, the short staff held in the fist and the pose of the statue – the overall appearance of the statue is nevertheless essentially Persepolitan, which demonstrates that superficial, subjective, stylistic assessments can be very misleading.

MINOR ARTS

Before Alexander burnt Persepolis he carried away all the immense treasure, which was transported by 10,000 mules and 5000 camels. Although much of this must have been bullion or coin, a considerable portion of it would have consisted of works of art, jewellery, furniture, carpets, textiles, clothes, weapons, and the like. Very few of these objects have survived. Many of them are, however, depicted on the reliefs, and these illustrations provide most of our information about the minor arts.

Achaemenian objects have been found in excavations at sites from all over the empire and a list of these has been compiled by O.W. Muscarella. Many more objects in the Achaemenian court style can by seen in museums and private collections, but many of the finest of these are modern forgeries. It is extremely difficult to date these objects accurately, for not only are their contexts, when known, often dated by the objects themselves, but there is also a probability that these valuable pieces were kept as heirlooms. They have frequently been assigned a date of *c.* 500 BC because of their similarity to objects shown on the reliefs. They were, however, made throughout the Achaemenian period and probably long after the dynasty fell. The manufacture of metal vessels in the Achaemenian court style is, for instance, depicted in the tomb of Petosiris, decades after the Persians had lost control of Egypt.

Cylinder and Stamp Seals

The problems of authenticity and dating are less acute for seals than for the other minor arts, not only because their impressions have been found on dated tablets but also because the seals themselves are often inscribed. The most useful corpus is provided by the impressions on the clay tablets found in the Treasury. These were written between the last years of Darius I and the first years of Artaxerxes I, incidentally almost exactly the period in which most of the monumental reliefs were carved. A further important collection of slightly earlier seal impressions on the Fortification texts is being studied by Margaret Root and will be published soon.



24. Drawing of the impression of an Achaemenian cylinder seal of the type used by royal officials.

There are a number of seal impressions on the Treasury tablets with inscriptions of Darius I and Xerxes I. These were not the personal seals of the kings but were used by his officials who were acting in his name. Without exception these seals showed a scene of the 'master of animals', one of the most common scenes carved on earlier Mesopotamian seals (pl. 24). The 'royal hero' is shown in Persian dress, triumphing over one or two beasts. Normally he has two opponents arranged symmetrically but sometimes has only one, as on the contest scenes on the Persepolitan palaces and on the royal seal of the later Assyrian kings. There is often a winged disc or other symbol of Ahurā Mazdā in the upper field, and for some reason a palm tree is placed in the background. Sometimes the hero and his opponents stand on top of sphinxes or other beasts.

The second most popular scene on the seal impressions is the worship of a symbol normally taken to represent Ahurā Mazdā. This symbol takes a number of forms; as a winged disc with two or four wings, often with a human bust emerging from the disc; or as a combined circle and crescent, which was also carved on the Achaemenian tombs and which in Mesopotamia was an emblem of the moon god. This also often has a human bust set in the circle. Other scenes include the hunt, war, animals, or mythical beasts, and ritual, such as a man in Median dress standing beside a fire altar and a table on which is placed a pestle and mortar, similar to those with Aramaic inscriptions found in the Treasury.

While the Achaemenians used cylinder seals for official documents, as had been done for millennia in Elam and Mesopotamia, private individuals tended to use stamp seals. Achaemenian stamp seals often bore the same motifs as cylinder seals, although many show considerable stylistic influence from the Greek sphere. It is probable that as clay tablets were replaced by papyrus for record keeping, so cylinder seals gave way to stamp seals, and purely Achaemenian motifs were superseded by Hellenistic designs.



25. Colour reconstruction of the symbol of Ahurā Mazdā on the Hall of 100 Columns, Persepolis.

Metalwork and Jewellery



26. A gold and lapis lazuli ear-ring found at Pasargadae.

Perhaps the finest Achaemenian works of art are to be found amongst the precious metalwork and jewellery made for the king and his court. On the reliefs elaborately decorated vessels, bowls, goblets, and above all spouted jars with animal handles are some of the gifts brought by the subject peoples to the king (pl. 27). However not one jar with animal handles has been found in an archaeological excavation, although horn-shaped rhyta with animal terminals, not shown on the Persepolis reliefs, have been excavated. One particularly fine silver example was found at Arinberd in Soviet Armenia, and this has a Mede mounted on a horse as its terminal. Pl. 28 shows a fine example in silver, said to come from eastern Turkey, ends in the forepart of a winged horned griffin. This is an early example of five guilding using an amalgam of mercury and gold. Numerous simpler bowls of silver, bronze, or glass, some decorated with rosettes, gadroons, and linked lotus buds and flowers have also been discovered in excavations.

On the reliefs the king and his nobles are shown wearing torques, bracelets and ear-rings, and gifts of jewellery are brought by some delegations. In addition two fine collections of late Achaemenian jewellery have been excavated in Iran, one in a tomb at Susa and the other buried in a pot at Pasargadae. The burial at Susa was that of an old woman, who still wore the elaborate jewellery that she would have worn in life – solid gold bracelets and a torque with lion head terminals, inlaid ear-rings and numerous necklaces made up of beads of gold silver, pearls and a wide variety of semi-precious stones including turquoise, lapis lazuli, emeralds, rock crystal, amethyst, carnelian, jasper, and agate. The Pasargadae hoard contained 1162 items. The larger objects there included a pair of gold bracelets with ibex-head terminals, three pairs of ear-rings and two elegant silver spoons. The workmanship of one pair of ear-rings is remarkable (pl. 26). They consist of penannular tubes of fine gold wire



27. A fine metal vessel brought by a Lydian (delegation VI) on the Apadana, Persepolis.

28. (*facing page*) A silver rhyton ending in the forepart of a griffin.



mesh just over 5 centimetres in diameter. Three rows of pomegranate and disc shaped pendants fill the centre of the ear-ring and suspended from it is an oval piece of lapis lazuli, enclosed in a cage of gold wire mesh.

Textiles, Furniture, Ivory, and Woodworking

Few Achaemenian works of art made of less permanent materials than stone, clay, baked brick, or metal have survived to the present day: but some idea of the quality of these works of art can once again be gained from the reliefs. The elaborately decorated garments of the king and his soldiers can be reconstructed from the glazed brick reliefs and from traces of painting left on the stone reliefs. Most reliefs were painted, and, as well as a few traces of the actual paint, some sketches scratched on the surface of the stone as guidelines for the painter have also survived. A reconstruction by Giuseppe Tilia of one of the figures of Ahurā Mazdā from the Hall of Hundred Columns gives an impression of the original gaudy appearance of the reliefs and of the Persian dress (see pl. 25). These multi-coloured robes were decorated with embroidery and metal appliqués. The reliefs show that the designs were of circles enclosing flowers, rosettes, and pictures of fortified buildings. The borders were decorated with walking lions and chevrons. The canopies under which the king sits on his throne are embroidered with lions, bulls, rosettes, and winged discs. An even more vivid impression of Achaemenian textiles is given by the rich finds from Pazyryk in the Altai. These, though found far from the centre of the Achaemenian empire, include typical Achaemenian motifs. No doubt the carpets and textiles in the royal Achaemenian palaces would have been of even higher quality.

The reliefs also give an impression of the furniture used in the Achaemenian court. Most of this would have been of wood but would have been overlaid with gold leaf and would probably have had bronze joints. Only thrones and footstools are shown on the reliefs (pls. 15 and 29), but the stool held up by the subject peoples on the tombs and on the doors of the palaces must also imitate furniture. The lion's feet that form the lower part of the legs and the terminals with animal heads are typical of Near Eastern furniture. A silver censer like those placed in front of the king in audience was found at Usak in Anatolia.

Only a few fragments of carved ivory in the Achaemenian court style and belonging to miniature statuettes and combs have survived, but it is probable that this material was more widely used, as it had been in the Assyrian period. Wooden sculptures were also probably quite common and were perhaps painted and covered with gold leaf. Indeed the Treasury tablets mention wooden sculptures more frequently than they do stone, although none are preserved.

THE LEGACY OF THE ARTS OF THE ACHAEMENIANS

The Achaemenian Persians ruled the civilised world for over two hundred years, and they devised an art suitable for the grandeur of their position. Created by the fusion of pre-existing traditions, it perfectly symbolised the might and authority of the Great King. The arts of the Achaemenian court belonged to the royal ceremonial tradition of the ancient Near East, seen particularly in the palaces of the Assyrian and Babylonian kings, but were alloyed with motifs from other regions of the Persian empire and tempered with a wholly Persian ambiance. Their style was not confined to the palaces of Persepolis, where it is seen in its most characteristic guise, but is found to a greater or lesser extent in other centres subject to the influence of the Achaemenian court. Furthermore it formed a coherent style in all branches of art, in architecture and sculpture, in seal design, and in the other minor arts.

Created under Darius I and Xerxes I the Achaemenian court style, like the Old Persian script, only lasted another century. This final flowering of ancient Near-Eastern art was swept away by the flood of Hellenism, just as the vestiges of the ailing Persian empire were swept away by Alexander. Occasional echoes of Persepolitan art are found in later works, but these various offshoots seem never to have flourished. It has been suggested that Achaemenian influence was important in the 'animal style' art of the steppes and in the arts of Mauryan India, but although particular techniques and motifs can be closely paralleled and undoubtedly Achaemenian influence played some part, the 'animal style' art was essentially independent, and the similarities with Mauryan art are also superficial.

With the dismemberment of the empire, this artificial hybrid did not survive and left behind no more than the few stark columns and eroded reliefs at Persepolis. These mute memorials to the ancient Persian glory, however, remained visible and were a vivid inspiration for succeeding dynasties – Sasanian, Buyid, Qājār, and Pahlavi – each of which represented itself as the legitimate heir of the first great Persian empire.

29. The king giving audience: the Hall of the 100 Columns, Persepolis.



4 THE ART OF THE PARTHIANS

DEFINITION OF PARTHIA

THE PARTHIANS RULED the realm of greater Iran nominally, at least, for nearly four hundred years, and they were a recognised dynasty longer than that. Yet of their history we know relatively little. The period failed to retain much significance for later Muslim writers who regarded the era as a dark age, of little importance, except that it had been obliterated by the light of Islam. A large proportion of even the few written sources that have come down to us are essentially items recorded by the chroniclers of Roman history,[1] writers who were often biased and had not even visited Parthia. There can be little question that when it comes to an understanding of the period, art and architecture are two of the most important documents.

The best preserved remains are monumental buildings and statuary. There are a variety of small objects, though the lack of sound dating criteria tends to reduce their interpretive potential. Immensely valuable evidence comes from Parthian coins because of the portraits they bear of the kings. Artistic conventions change as the era progresses. The coins, however, are not without their own special kinds of drawbacks, not least due to the fact that, until the mid-1st century AD, the king is identified only by the generic title 'Arsaces' and not by his individual name.[2] The known corpus of Parthian artifacts also includes a limited variety of inscriptions, but here again the evidence is obscure and no literature from the period has survived in its original form.[3] There are a few inscriptions on small objects, particularly the wine records from Nisa (the original capital of the Parthians in Soviet Turkmenistan),[4] though those from other sites are often more famous for the challenge they present the linguist than for the meaningful substance of their contents.

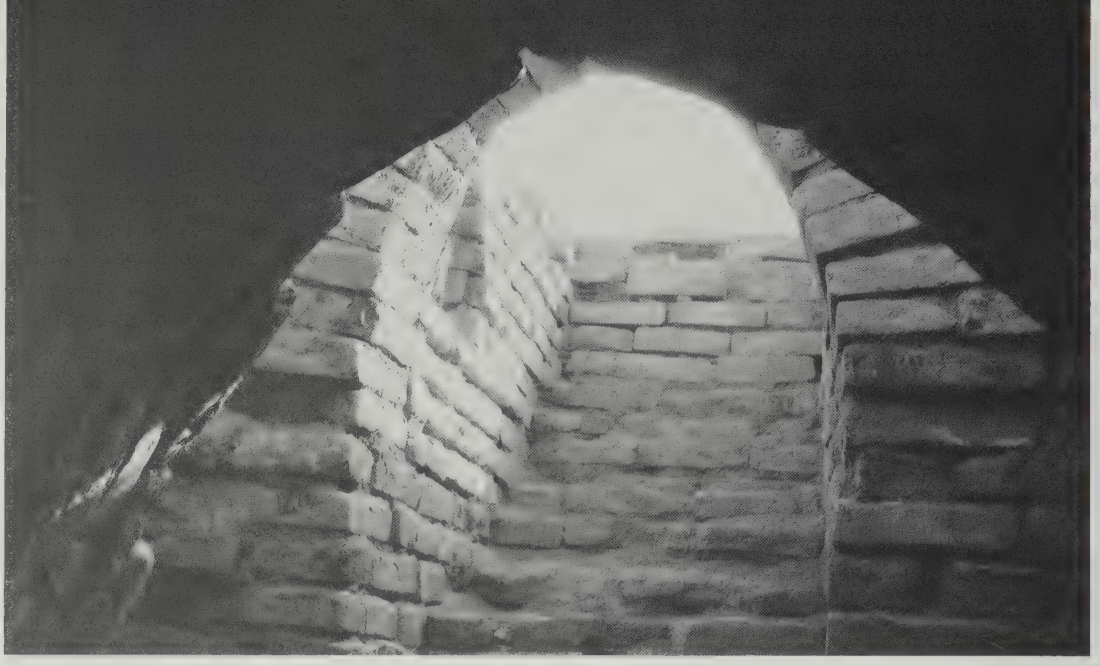
The value of the architecture resides in the physical realities of the objects. The stones cannot lie. They can, of course, be subject to interpretation, with all the connotations of bias that this implies. Interpretations of Parthian art have tended to be coloured very strongly by the West's indebtedness to the classical heritage of Greece and Rome. There has been a tendency for many commentators, from the 13th/19th century to the present, to equate closeness to a classical model with an 'ideal' quality, and departure from these norms with 'debased orientalism'.[5]

One of the problems with trying to come to grips with the Parthians is the fact that the term 'Parthian empire' is a misnomer. At best, the King of Kings controlled no more than a loose confederation of client kings and feudal lords, with no standing army, and with varying degrees of semi-independent status enjoyed by individual cities. The relative strengths of the minor rulers tended to change with time, depending upon alliances of marriage or concessions awarded in return for help in the military defence of the country. Of course, ultimately the supreme monarch's own personal standing had a direct bearing upon how strong rival members of the nobility became. Interference from abroad, especially in Rome's repeated attempts to manipulate the question of Armenia to her own imperial advantage, frequently played a major role in Parthian politics. If there is any general pattern to observe it is that, after the initial expansionist movements culminating in the capture of the Seleucid capital in 141 BC, the realm of Parthia began an inexorable slide towards fragmentation.[6]

It is evident that the known major Parthian sites are few and far between in the territory under consideration. The majority of the 'name' sites fall in the western and north-eastern extremeties of the area, and most lie outside the boundaries of modern Iran. There is a noticeable absence of sites in the Tehran-Iṣfahān-Shīrāz corridor. Perhaps the early shift of the capital to Mesopotamia in the mid-2nd century BC was sufficient impetus to cause the development of the western part of the empire at the expense of the Parthian heartland. Even in Fārs there have been no instances of important Parthian sites being discovered, and

1. Nude female. Part of decorative stucco column of figures in superimposed registers, possibly representing a theatrical performance. Royal Ontario Museum excavations, Qal'eh-i Yazdigird, 1976–79.

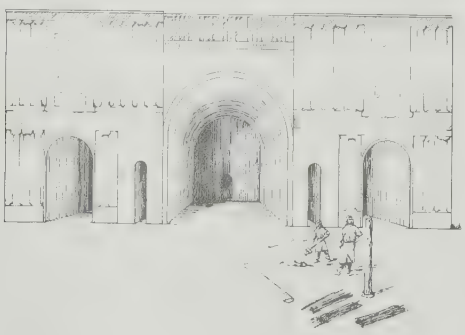




2. Nippur. Vaulted staircase of a crypt. Baked brick. Burials in Mesopotamia were often placed inside a tomb within individual slipper-shaped coffins. Oriental Institute, University of Chicao exavations at Nippur, 1966–7.

3. Nippur. Blocked doorway. Mud-brick. The propensity in Mesopotamia for building with sun-dried brick included its use in arches and vaults. Oriental Institute, University of Chicago excavations at Nippur, 1966–7.

4. Nippur. Reconstruction drawing of an *īvān* complex. Temporary structures were erected on specific occasions in front of the open hall. Oriental Institute, University of Chicago excavations at Nippur, 1966–7.



one must suppose that they did exist, since it is well documented as being the Sasanian homeland. Certain sites, traditionally identified with the Parthian period, such as Kangāvar, Istakhr, Kirmān, and Darabgird, have yet to be proven to contain any major pre-Sasanian occupational levels.[7] There are references in texts to cities in Parthian times.[8] One may have to acknowledge that the plateau, however, was not nearly so urbanised as the Mesopotamian plains. On the other hand, surface surveys in recent years have produced evidence of extensive settlement of the countryside, more so than from any preceding era.[9] Some of the relative absence of sites is bound be due to archaeological chance and one may have to acknowledge that the proper picture will not emerge until more extensive surveys have been completed.

It should not be ignored, however, that from the 1st century BC Parthia began to lose territory to various other groups of tribes or ambitious princes. By around AD 60, the sites of Nisa, Kūh-i Khwājeh (in Sīstān), and Shahr-i Qūmis (Hecatompylos, a former Parthian capital, in the province of Gurgān)[10] lay outside the domain of territory controlled from Ctesiphon. In the west, the famous site of Hatra[11] was built by an Arab principality which maintained only nominal ties with the Parthian crown. Dura-Europos fell into Roman hands in AD 164, and its artwork should be viewed under a special light.[12] As for Palmyra,[12] it was never a Parthian possession, yet it is often cited in the great debate about the nature of Parthian art by those whose background is the classical Mediterranean. Even closer to home, in the foothills of the Zagros at sites such as Qal'eh-i Yazdigird (in Media) (pls. 1, 8–14) and Masjid-i Sulaymān and Bard-i Nishandeh (in Elymais) [pl. 21], the monuments were sponsored by figures who were in direct confrontation with the Parthian King of Kings or who, at very best, paid him only token allegiance. This division of the realm into two separate regions is attested, in part, by the fact that the distribution of coin types known for the Mesopotamian plains and the Iranian highlands respectively implies two different or separate economies.[14] Coins that circulated in these two areas were of different denominations of silver, and the imagery of these tetradrachms and drachms was also distinctively different. This implies that there is only a narrow strip of land in the middle of Iraq that one can be associated with the Parthian dynasty itself in terms of defining the actual artwork of the era's most creative period. According to this definition, Parthia would be represented by sites such as the new foundations of Seleucia and Ctesiphon (the political capital), as well as the ancient cities of Ashur, Nippur (pls. 2–4), Larsa, and Warka.[14] Except for Hecatompylos in the early period, Iran would not be represented at all in a culture that would need to be described under the dynastic label 'Arsacid'.

It is obvious, then, that in order to define the material culture of the period in question one should not be limited strictly to the area controlled by the Arsacids directly from Ctesiphon. The problem then becomes one of where to stop. There is a risk that the inquiry becomes a self-fulfilling prophecy, if the choice of subject matter is limited only to that which fits the initial definition. For the term Parthian should not be used, either, simply to encompass the post-Alexandrian experience of the entire Middle East. The vocabulary of art history is then permeated by the use of such nebulous terms as Graeco-Iranian, Indo-Parthian, and Kushano-Parthian. The permissible compromise is to consider any art that was produced in the Parthian homeland before the mid-2nd century BC, and afterwards, in any of the territory actually administered or garrisoned by the Parthians. This excludes the

Punjab (sites like Taxila), northern Afghanistan (Bactrian sites like Surkh Kotal), Soviet Transoxiana (e.g. Khalchayan), Armenia and Asia Minor (e.g. Nimrud Dagh), and Syria (e.g. Palmyra and Dura-Europos). An exception is made in the case of Hatra (pls. 14, 16–19), an independent Arab principality, because popular convention has always represented this as a 'Parthian' site.

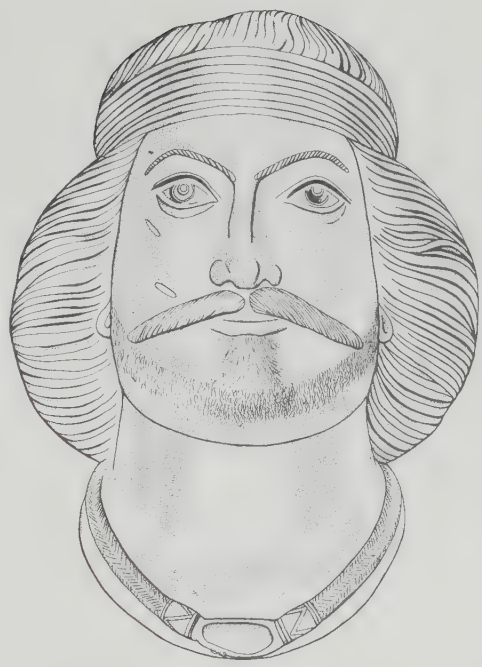
ART PATRONAGE

Notwithstanding the lack of systematic dynastic control over the territory, the later Parthian centuries were artistically very vigorous. In the early period, before the capture of Seleucia, buildings erected reflect Hellenistic practices in effect elsewhere, though examples can be pointed out where the architects have strayed from the classical norm in their use of a particular order or the positioning of a column.[16] Towards the 1st century AD buildings were produced with a variety of groundplans and wall decorations, in an eclectic mix that tends to thwart any attempt to define the nature of Parthian art. One may argue, however, that the variety reflects lively experiment, and the outcome was the emergence of artistic norms that lasted well into the Islamic period.[17]

It is perhaps not without significance that the most distinctive Parthian expressions in the arts occurred when the area was politically and economically unstable. There was high inflation and they frequently resorted to debasing the currency. But, interestingly enough, the economic factors which were beginning to cripple the empire may actually have fostered the development of the arts. The dimensions of international trade in the 1st century AD were such that huge wealth could be accumulated in certain segments of society. It is reasonable to suppose that these *nouveaux riches* were particularly active in the sponsorship of the arts, building palaces and monuments to the glory of their own names, and dedicating shrines to the gods for their successful business dealings. Travelling salesmen may have had a field-day peddling products and building designs, as they catered to new pretensions. In other areas where trade did not have such a direct impact, as in many parts of the Iranian plateau, there may have been a perfectly viable local economy, as demonstrated by the vast numbers of Parthian farmsteads or villages found on survey in the Kangavar and Māhī Dasht plains. But the level of art patronage clearly did not approach that exercised by the inhabitants of Mesopotamia. As a result, what Schlumberger described as the 'rustic' quality of the sculpture from Bard-i Nishandeh[18] or the rock reliefs at Tang-i Sarvak (both in Elymais) lies in marked contrast to the superior worked stone products of Hatra. The famous bronze statue from Shami (also in Elymais) (see pl. 5) is a superior product, too, but the significance of this work is considerably reduced by the lack of consensus on the date of its manufacture, and complicated by the unfounded suggestion by Godard that the head was made by an outsider and the body by a local craftsman.[19]

There may be some significance to be found in what can best be described as the 'social revolution' of the era. A seven-year revolt in Seleucia, which was terminated in AD 43, may have had economic issues as the basis for the upheavals. McDowell promoted the idea, which has still not been refuted, that by the mid-1st century, the formerly influential inhabitants of Seleucia, who were of Macedonian origin, had begun to be eclipsed by various non-Hellenised groups, including Babylonians and Jews.[20] McDowell argues that the revolt was not of Greeks against the Parthians, but rather of a 'native' party against the Greeks. The end result was a city that lost its independent status. The issue is complex, and the facts are few, but there can be no denying that, from the mid-1st century onwards, artistic expressions no longer bear the same kind of relationship to Hellenistic models as they did before. Two new expressions illustrate this most effectively. These were the emergence of a concept for creating a dramatic focal point in buildings through the use of a vaulted, open-ended hall facing a court (*īvān*) (pl. 4), and the adoption of an imposing way of depicting human figures facing the observer directly from the front (see pl. 6). We know the *īvān* mostly from Mesopotamia.[21] Dates for its appearance at Kūh-i Khwājeh are still problematical, and Gullini's dating of different levels has been challenged by most commentators.[22] But the development of both mud- and baked-brick vaulting is well documented in Mesopotamia[23] (see pls. 2–3) and it may only be a matter of time before the *īvān* is recorded on the plateau as well as the plains, given the similar environmental conditions in many parts of Iran where brick would have been a natural building material. As for sculpture, the discoveries in Elymais have demonstrated that artists were working within the framwork of a Parthian style, even though the standards of technical craftmanship were moderately crude.[24]

Whether the changes that the new building plans and sculptural traditions represent a deliberate and intellectual turning away from the old Hellenistic models, or whether they reflect something much more practical, such as the unsponsored emergence from obscurity



5. Head of famous larger than life bronze statue from Shami. Date frequently disputed between beginning of second, end of first century BC. Excavated by Aurel Stein, 1934. Īrān Bāstān Museum.

6. Hatra. Larger than life statue of unidentified worshipper bearing trappings of office, in act of adoration in main temple complex. Classic frontal pose. Excavations of the Iraqi Directorate General of Antiquities, 1951–67.





7. Mother-goddess figurine. Miniature gold charm pendant Royal Ontario Museum collection Ht. 1.7 cm.



8. Dancing male in tunic and tall Scythian cap. Part of same column register composition as item no. 1. Royal Ontario Museum excavations, Qal'eh-i Yazdigird, 1976–9.

10. (*facing page*) Nude female holding dolphins by the tails. Engaged column capital in stucco, painted overall red. The form of the figures suggests a source in the Aphrodite traditions of the West, but the meaning may not necessarily be linked irrefutedly to the original form. Royal Ontario Museum excavations, Qal'eh-i Yazdigird, 1976–9.

of long-standing, indigenous artistic practices, is hard to judge. The newly created wealth had a tendency to permit far wider patronage in art than before when power and wealth had been in the hands of a relative minority. Sponsors were in the habit of looking to established artisans (i.e. the Macedonian settlers) for works of art. Schlumberger described Parthia of the 2nd century BC as a period of 'Greek art for non-Greek princes'.[25] Thus, the famous ivory rhytons from Nisa can be looked upon as anomalies, for they are generally taken to represent something Greek in their art, albeit appropriately linked to the ancient heritage of the Middle East in the choice of vessel use. By the first two centuries AD we may be dealing with a kind of 'democratisation' of the arts, as individual economic prosperity permitted the expanding mercantile class and the proliferating petty nobility to indulge in established formulas of success, but expressed in a new fashionable style. It has become acceptable amongst commentators on the period to speak of an 'orientalising' trend in Parthian art,[26] an artistic revolution, in fact.

The change is all the more significant because the frequent contacts with Rome through trade or war made it quite possible for it to have increased western influence in the arts. Yet while there may be details which are clearly borrowed from the West, the overall effect of the finished product is definitely Parthian. Much attention was paid by past commentators to the workshops of Seleucia which retained close links with the classical past. But it should be borne in mind that the original settlers had come in the 4th century, following Alexander's conquest of Asia. Artists were working with designs and concepts at least four hundred years after the creation of the original models. One may point out that, even when classical details are reproduced fairly faithfully, one cannot necessarily be sure that the same iconographic meaning is retained. A manufactured item, such as a Roman bronze lamp, might become the source of a stucco plasterer's decorative detail. It is possible that the concept of Dionysus had sufficiently infiltrated the Middle East so that Dionysiac iconography could be consciously and meaningfully employed. But it is equally possible, for instance, in the case of an Aphrodite figure portrayed accurately in a classical vein, that the artist might have intended to portray an Asian deity of slightly different character (see pls. 7 and 10).

ECLECTIC COMPOSITIONS

At times there is a confusing eclecticism of subject matter, and it becomes a challenge to ascertain whether it all has a meaning, or whether it is all no more than an indulgence in the exotic. This lesson is nowhere better given than in the stucco finds from Qal'eh-i Yazdigird[27] (pls. 1, 8–14). A palace was the archaeological source for a rich variety of ornamental stucco wall and ceiling decorations which included both natural and mythical human and animal forms, geometric and stylised vegetal compositions, architectonic elements, and other repeat designs.



9. Griffon protome. Stucco plaque with decoration in shallow relief showing beast in profile. In composition and style the figure is a forerunner of Sasanian *senmurv* representations. Royal Ontario Museum excavations, Qal'eh-i Yazdigird, 1976–9.



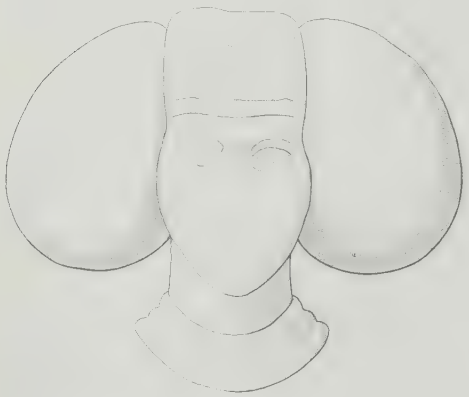
11. Repetitive stylised motif. In-situ stucco decoration from niche architrave panel. Bud-and-tendril motif. Royal Ontario Museum excavations, Qal'eh-i Yazdigird, 1976–9.

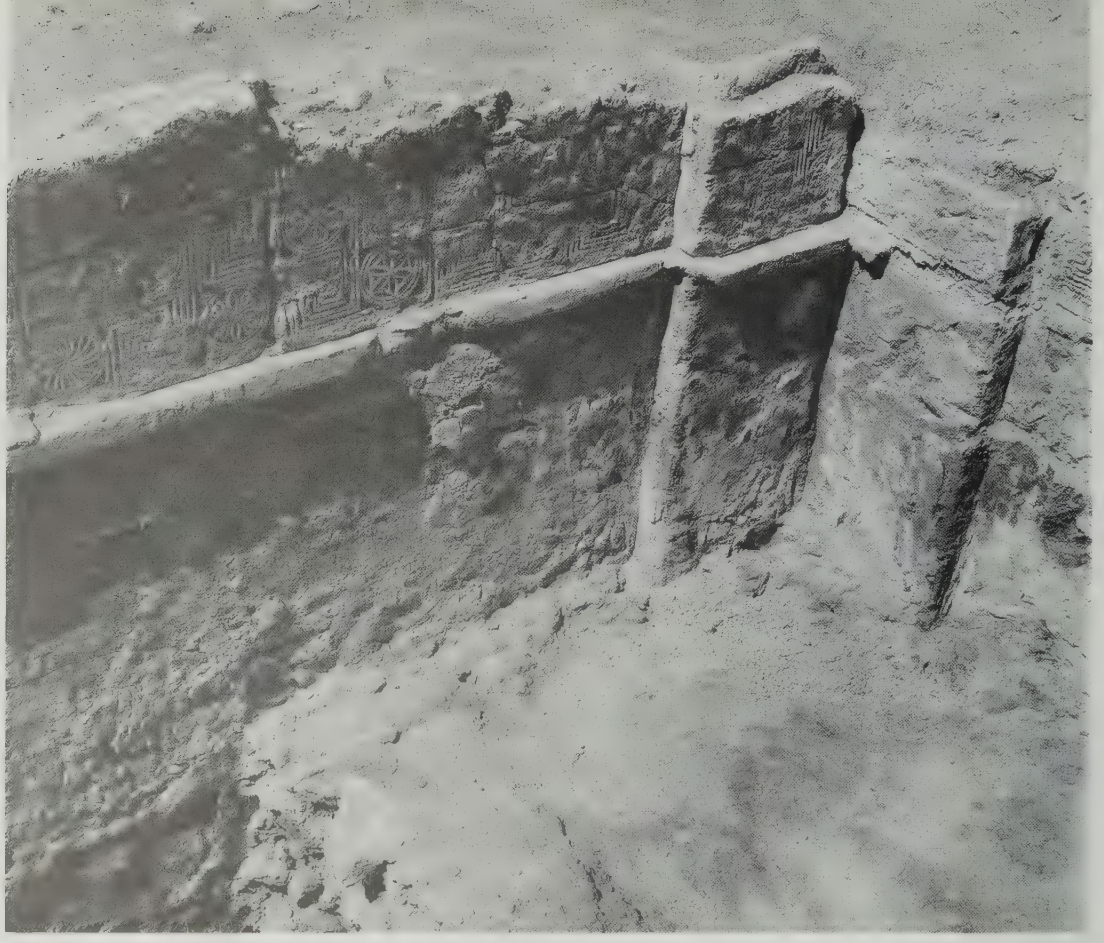




12. Qal'eh-i Yazdigird. Nude hero in combat with lion. Engaged column. Figures are portrayed either in full profile or half-turned. Treatment of scenes in registers reminiscent of Gandharan art. Royal Ontario Museum excavations. Qal'eh-i Yazdigird, 1976–9.

14. Qal'eh-i Yazdigird. Male bust with exaggerated hair side-bunches. Hairstyle and pose typical of Parthian portraiture in western Iran. Royal Ontario Museum excavations, Qal'eh-i Yazdigird, 1976–9.





The stuccoes are gypsum plasters that have been manufactured through a combination of carving and moulding techniques. There is evidence of several repaintings of the stuccoes in either plain or polychrome colours. The schemes generally involved the blocking out of a figure in a strong colour against a different background. The best parallels for the wall decorations can be found in the 1st and 2nd century AD stuccoes from Seleucia-on-the-Tigris, Ashur, and Warka (all in Iraq), and from Kūh-i Khwājeh (in Iranian Sīstān).[28] There is evidence that two separate phases of decoration were involved at Qal'eh-i Yazdigird, possibly connected with repairs following a natural disaster.[29] But the occupation of the palace was short-lived. There is no indication that any of the schemes were designed as late as the Sasanian period.

Many of the subjects illustrated reveal distinctly different characteristics. For example, amongst the stuccoes is a procession of marching griffons which are portrayed in a standard manner with beaked head, flared wing and rigidly curved tail. The effect is markedly different from that the winged protome of a griffon (see pl. 9) which, with its diminutive forepaws, heralds the stance (if not the precise details) of the Sasanian *senmurv*.

A similar juxtaposition of decorative elements in different styles can be observed in the human figures portrayed at Qal'eh-i Yazdigird. One of the wall plaques carries the figure of a male bust which is set in a roundel and portrayed frontally (pl. 14). This types of frontal pose and bunched hair-style can be matched exactly to certain issues of coins and to rock reliefs. It is distinctively Parthian. The type is quite different from images of males reproduced in the same building at Qal'eh-i Yazdigird which are shown with curled hair and wearing Roman togas. The figures are clearly human, and not those of gods or cherubs, so it is legitimate to ask who they represent, and why they dress differently? Or is there here a parallel with the way in which an Arab sheikh wears alternately traditional or western garb, depending upon the desired effect?

There is no doubt that artists were realistic in their portrayal of people. They did not indulge in idealised portraits the way their Greek predecessors did. On the coins (pl. 15), great attention was paid to small details, even to the extent of reproducing a facial blemish. When not shown as a nodule above the temple, the tumour is replaced by lock of hair worn below the diadem band, a normal disguise for such a defect.[30] One of the most marked characteristics of Parthian art is the concern with self-image. It has given rise to a whole series of statues and portraits of individuals in which the artist has placed more importance on the personal trappings of the individual than on the beauty of the subject's form. This concern with symbols may be an adjunct of, or even the reason behind, the distinctive way of presenting a figure full-face, in the new 'frontal' pose.



13. (*facing page*) Qal'eh-i Yazdigird. Repeat pattern of interlocking key device and roundels forms part of an in-situ frieze. 'All-over' patterns were a typical decorative treatment in the architecture of Parthian Mesopotamia and Iran. Royal Ontario Museum excavations, Qal'eh-i Yazdigird, 1976–9.

15. Silver tetradrachms. Portraits of Parthian kings, AD 50–150. Artists were careful to preserve individual features, including physical blemishes. American Numismatic Society.

FRONTALISM

Frontalism is assumed to be a way of presenting a figure in a more imposing way, increasing the subject's bearing by the more immediate face to face contact. Frontalistic treatment can occur in the same scene as a profile view. When used it was a preferred technique and not an indication of the limitations of an artist's skills. Details of dress may reveal a person's rank or social background. This is important if we assume that the sponsors were often the petty nobility or the *nouveaux riches*, both of whom no doubt were concerned about imagery in their jockeyings for better positions in social standing. As we have noted, there was much concern for self-image in Parthia. Even the adoption of the title 'King of Kings' by Mithridates II (and henceforth by most Parthian monarchs) can be considered as a reflection of the king's need to establish his legitimacy in the eyes of Parthia's subjects, by appealing to the idea that the king was heir to Achaemenian authority.[31] It is significant that the title was adopted at a time when Parthian control over its newly conquered teritory was beginning to wane.





16. Hatra. Details of costume on statue of royal figure (King Volgasn). The artist has paid great attention to the costume without the slightest attempt at beautifying the body inside it. Excavations of the Iraqi Directorate General of Antiquities, 1951–67.

17. Hatra. Interlocking key device on recycled statue block. The use of an architectural device on costume underlines the way in which Parthian artists ignored the normal artistic conventions which would have restricted this type of decoration to its use on a building. Excavations of the Iraqi Directorate General of Antiquities, 1951–67.

With regard to the different kinds of dress that one can see in the period's artwork, the most common costume is an outfit that includes baggy trousers (*shalvārs*) (see pls. 6, 8 and 16) worn beneath a mid-thigh-length, belted tunic. It is a particularly suitable dress for riding horses as we learn from Tacitus' lucid description of two rivals contesting the Parthian throne. Tacitus reports how the Parthian nobles became intensely scornful of Vonones because he aped so many fashions of the West, including the habit of riding the streets in a litter and dining like a Roman.[32] Artabanus, his rival, and the 'native son', apparently preferred the more acceptable practices of horse-riding and feasting in a traditional way. One may assume that their clothes also matched their ways of life. In dealing, then, with a small amount of surviving artwork, one faces the problem of having to distinguish between individual fashion, which is faithfully represented by the artist, and a conventional style which simply uses a standard treatment for figures of a certain type. The concern for personal touches – badges of office (pls. 6 and 16) and individual facial features, warts and all – seems to imply that figures are portrayed in Parthian artwork the way they are seen.

REPEAT PATTERNS

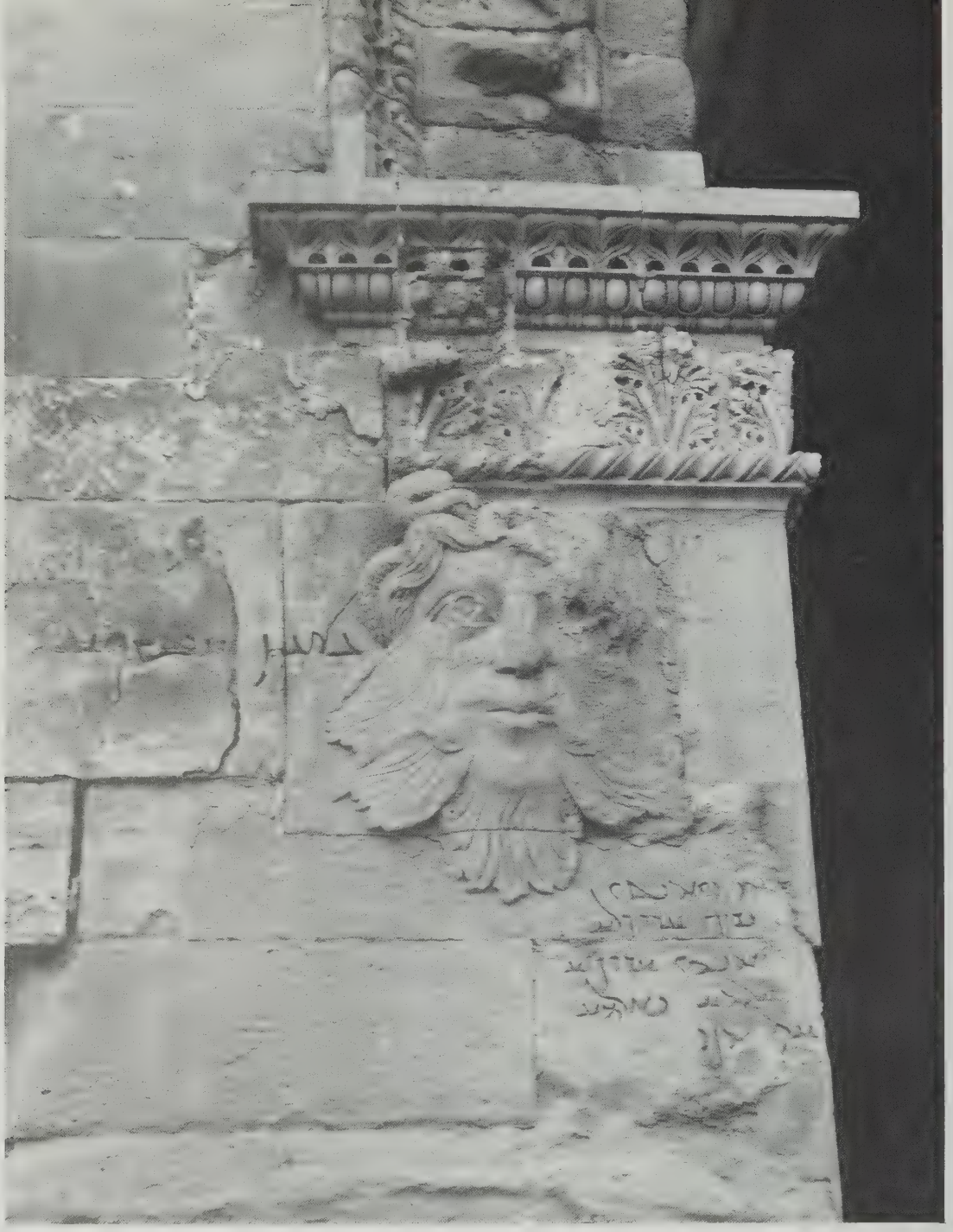
Decorative stucco in buildings enjoyed a tremendous vogue under the Parthians. Readily available as a resource and easily worked, stucco became the standard ornament for buildings constructed from a variety of base materials. The speed with which it could be laid tended to encourage a 'wall-paper' effect where linked designs covered surfaces in an 'all-over' pattern (pls. 10 and 13).[33] Possibly the development occurred in close association with the idea of hanging rugs in a dwelling. It may not be unreasonable to see the nomadic origins of the Parthians playing a role here, in providing both the textile tradition as well as the need for climate control. Motifs used in the stucco designs were often employed with little concern for their original function and meaning. Thus, a reel and bead moulding could be used to break up the surface of a composition into separate panels, disregarding the architectural origins of the device as a running motif for a projecting member. Or a running, interlocking key device, also derived from architecture, could be used on costume (pl. 17).

The liberties which artists took with motifs like this can be seen as a harbinger of some of the things that were to happen in Islamic art. An indiscriminate use of architectonic devices was very characteristic of Parthian art. The merlon (stepped crenellation with arrow slot) was a traditional element surmounting the parapets of ancient Middle-Eastern buildings. Used as full-scale military devices as long ago as the Assyrian period, these forms had become architectonic by Parthian times, and appear extensively in a variety of ways in the Qal'eh-i Yazdigird stuccoes.[34] The merlon features frequently as a decorative parapet in the Sasanian period, both atop buildings such as the Tāq-i Girrā arch, as well as in illustrations of buildings shown in later metalwork. The stepped crenellation is ubiquitous in the mosque architecture of early Islam. Other examples of innovations can also be seen in the Qal'eh-i Yazdigird stuccoes. By taking a circle containing a cluster of tendrils, splitting it, and putting the two halves back to back,[35] artists were creating in effect the same principle that applies in the arabesque, where natural forms are subjugated by abstract design.

The vitality of late Parthian art, as well as its eclecticism, is no doubt a reflection of the strength of local traditions. The realm was fragmented, and there was no such thing as an 'imperial' art. But local populations flourished, and archaeological surveys attest to tremendous growth in certain areas, with often diverse local traditions, particularly in the production of pottery. Given the fact that at least some of the ancient temples of Babylonia appear to have functioned along traditional lines until as late as the 1st century AD,[36] it is hardly surprising to see the survival of many motifs and symbols from earlier times. Mother-goddess figurines, of a type scarcely distinguishable from those of centuries earlier, appear alongside the very latest in imports from the West.[37] Strange beasts reflect the ancient Mesopotamian fondness for hybrid monsters. Here, again, one can use the analogy of the Qal'eh-i Yazdigird stuccoes to show how Parthian art served as the intermediary for the transfer of imagery from the ancient world to that of Islam.



18. Hatra. Horse's head and unidentified male bust. A frontal pose was the standard way to present a figure in Parthian art. The use of oblique presentations indicates that frontality reflects a conscious choice of stance, not a lack of skill. Excavations of the Iraqi Directorate General of Antiquities, 1951–67.



19. Hatra. Bust of Shamash. Figure and inscription flanks the *īwān* of the main temple. Cameo-like busts were applied frequently to the surfaces of architecture as well as works of art, such as ivory and ceramic drinking vessels. Excavations of the Iraqi Directorate General of Antiquities, 1951–67.

In many aspects of material culture, Parthia is best defined by thinking of it in terms of regionalism. Different pottery types, for instance, can be associated with the different areas. Haerinck proposes five distinct kinds.[38] From this limited regional production and distribution one can infer strong local traditions. With the variety of terrain, too, it is natural to find a range of different building materials used, from sun-dried brick to stone rubble. Even within these separate areas, individual approaches were often taken to solve problems, sometimes with disastrous results. Quite definitely, this was a period of experimentation and there were no standards laid down by a central bureaucracy. Choices were dictated by local tradition or taste. It speaks of artistic licence, at times verging on anarchy.

PERSONAL EXPRESSION

The same free-for-all exists in matters of religious expressions. The Parthians can be credited with a relative tolerance of minority religious faiths, and no one practice acquired a dominant position as it did under the Sasanians. Whether this phenomenon stemmed from a position of weakness on the part of the Parthian kings or not, the upshot was that religion tended to take a back seat in the arts. This is not to say that there were no temples or votive objects.

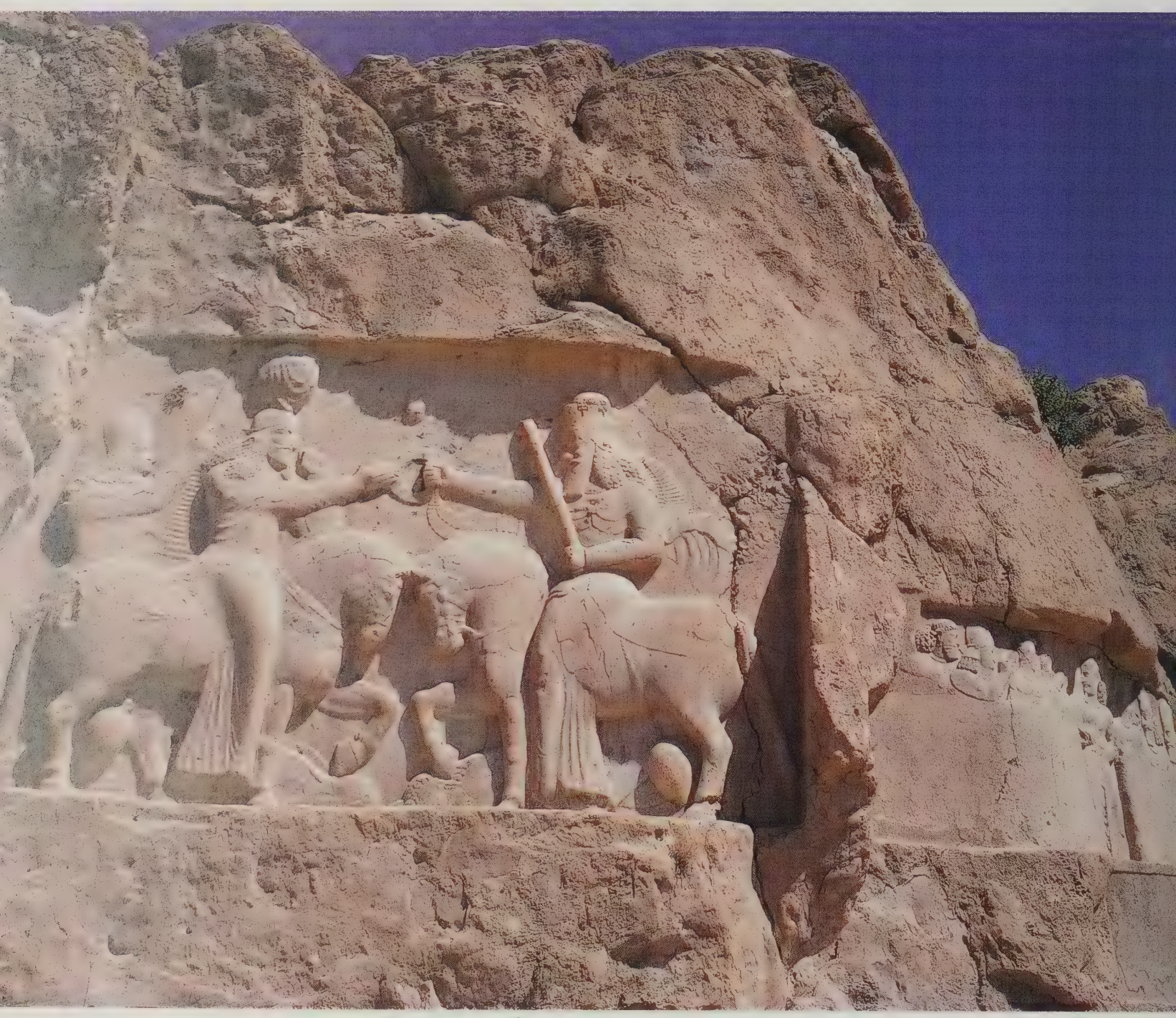


20. Tell-i Badr. Terrace platform in the mountains of Elymais. The Parthians continued the tradition of platform construction developed by the Achaemenians.

After all, perhaps the most famous of all known Parthian monuments is the Temple of Shamash (Sun God) at Hatra (pls. 6, 16–19). But for all their grand size, and for all the decades we know from inscriptions it took to erect them, the monuments at Hatra are human scaled. They are dwarfed by the contemporaneous baroque structures of imperial Rome. And, at Hatra, even though we know (also from inscriptions) that these structures were dedicated to deities, as temples, there is a great deal of ambiguity as to how these monuments operated. There is no justification any more, since the careful work at Hatra of Iraqi archaeologists like Safar, and with the subsequent analyses by Najafy and Al-Salihi,[39] to call the central monuments anything but a sacred sanctuary. Clearly the structures are not a palace the way the original German excavators envisaged. But with the votive statuary, the site's most distinctive artwork, religion seems to be merely the vehicle for an individual's self-display. One cannot help but think of the way in which deification of the emperor had become part of the Roman consciousness following Augustus. In one sense the Hatra statues are no more religious in essence than a rock relief depicting the king handing out a fiefdom or lording it over a conquered vassal. As a gesture of self-advertisement, it is the most typical expression of Parthian art. The crude sculptures from the site of Elymais (pls. 20 and 21) belong to the same tradition as the votive statuary from Hatra.[40] There is a common denominator that links both the plateau and the plains, and allows one to characterise the period by the use of these personal expressions, in spite of the fact that the standards of craftsmanship and modes of presentation may have been so vastly different.



21. Bard-i Nishandeh. Monumental staircase of the terrace, as excavated by Roman Ghirshman, 1975.



5 THE ART OF THE SASANIANS

INTRODUCTION

When the Sasanian Prince Ardashīr defeated the last Parthian king in about AD 224, he became heir to one of the three great empires which controlled much of the then civilised world. To the east of the new Sasanian empire was China, to the west the Romano-Byzantine empire. These three powers were linked by a vigorous trade, bringing silks and spices to Rome, and Roman gold and artifacts to the East. The Sasanians were able to profit from their strategic central position not only to exact taxes on this trade, but also frequently to control it. As material goods flowed east and west, so too did less tangible matters like religions, ideas and artists.

From the 3rd to the 7th centuries AD the Sasanian state controlled a vast area stretching from the Euphrates across modern Iraq and Iran and into Central Asia and Afghanistan. None of these frontiers were fixed and to maintain them the Sasanians had to fight. In the west the status quo was broken if either side saw a possible advantage, while in the east the Sasanians had to strive to control whichever tribal power was strongest between China and Iran. This situation changed with time, and in the 5th century the Sasanians succumbed for a while to the relentless tribal pressure. Usually, however, they were dominant.

Under Parthian rule the Sasanians had been minor kings of Persis, former homeland of the Achaemenian kings, from whom they claimed descent. This was their justification for seizing power, for they considered the Parthians to be usurpers. Because of their identification with the Achaemenians, their art has frequently been thought to be a renaissance of Persian traditions, coupled with a deliberate rejection of the Graeco-Roman values which had been so enthusiastically accepted by the early Parthian kings. However, Hellenism continued to play a decisive role in Sasanian art, which is a synthesis of ancient Near-Eastern and Graeco-Roman traditions expressed in a new, uncompromisingly Iranian manner. Just how completely some Hellenistic concepts had been absorbed by this time is shown by a comparison between sculptures of the Achaemenian and Sasanian periods illustrating the relationship between god and king. In Achaemenian times the supreme deity of the Zoroastrian pantheon, Ahurā Mazdā, is represented as a winged disc hovering above the king (see pl. 25 on p. 44), while in the Sasanian period he is shown on an equal footing with the monarch (pl. 1 and 7). This more earthly vision of the deities was essentially Graeco-Roman.

Although not yet fully documented, Roman influence continued throughout the period to a greater or lesser extent. It appears, for instance, to have been rejected, probably deliberately, by the founder, Ardashīr (224–41), but was of great importance in the time of his son, Shāpūr I (241–72), who settled thousands of Roman prisoners throughout the land. This policy of mass resettlement of foreigners was also followed by Shāpūr's great-grandson, Shāpūr II (309–79), and we can expect to see the effects of this in the art of the time, although unfortunately, only a few artefacts can as yet be attributed to his reign with relative certainty. Finally, Khusrau I (532–79) resettled the entire population of Antioch-on-the-Orontes near his capital city of Ctesiphon, as well as welcoming to his court Greek philosophers, for whom he founded a university at Gundeshāpūr.

Much less information is available about Sasanian relations with the East, although we do know that embassies were exchanged with the Chinese. The most obvious source of Chinese influence on Sasanian art would have been the designs woven on the silks, which were traded as made-up pieces rather than thread. The Chinese succeeded in keeping the secret of sericulture until the 6th century. There is, as yet, little evidence of such influence, perhaps because most of our available information, drawn both from reports of extant monuments and from excavations, is concentrated in the western half of the empire. The Central Asian nomads may have been the inspiration for the ever-increasing quantity of jewellery worn by the later kings: and Indian influence can be seen on some silver vessels. At

1. General view of investiture of Ardashīr I, Naqsh-i Rustam.

present, however, the Romano-Byzantine West seems to have left a more positive imprint than the East.

This chapter will attempt to outline some of the changes which took place in art and architecture during the four centuries of Sasanian rule. There are, however, many problems in trying to establish such an outline. The dating and function of many extant Sasanian buildings is still uncertain, as can be demonstrated by the recent suggested redating of the 'palace' at Sarvistān, long considered to be mid-Sasanian, to the early Islamic period and also the querying of its function.[1] Few of the most familiar Sasanian artefacts, the beautiful silver vessels, have been found in controlled excavations, and their dating, too, is problematic. Similar difficulties occur in nearly every area of Sasanian art, including stucco, silk, glass, seals, jewellery and pottery. These problems are caused by the vast size and duration of the empire, the paucity of well-documented, excavated artefacts to provide an internal sequence of development, and by the continuing popularity of Sasanian art after the fall of the dynasty. Fortunately, there is an unbroken series of coins, and these, together with the rock reliefs which some kings carved on cliffs near their cities and palaces, provide the foundation on which Sasanian studies rests.

THE BUILDINGS OF ARDASHĪR



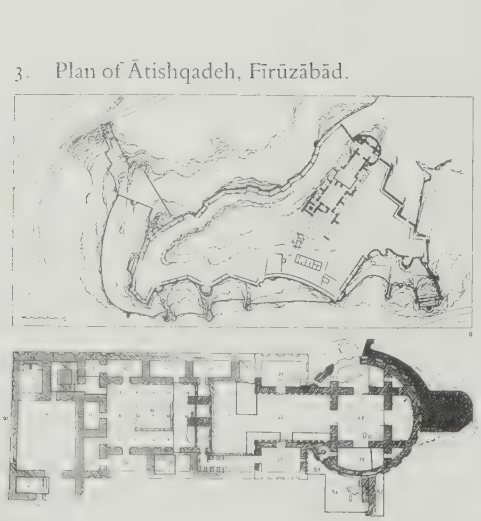
2. View of Qal'eh-i Dukhtar at Fīrūzābād.

Ardashīr had probably already built his magnificent fortress-palace, Qal'eh-i Dukhtar or Maiden Castle,[2] before he defeated the last Parthian king, Artabanus. It is built on a spur of mountain overlooking the road which leads from Shīrāz to the Persian Gulf via Fīrūzābād. It was in the nearby Fīrūzābād plain that he founded his great circular city,[3] which he called 'Ardashīr-khurra' (the glory of Ardashīr). Like so much of Ardashīr's oeuvre the plan of this city, with its concentric and radiating layout extending beyond the city walls into the plain, is exceptional. Surveys have revealed twenty sectors, precisely laid out, around an inner core which probably contained official buildings.

The best-preserved buildings in the area are, however, located well away from the city, and consist of Ardashīr's garden-palace in the plain and his fortress-palace, Qal'eh-i Dukhtar (pl. 2). Although built so early, the latter already bears all the characteristics of a Sasanian building. Ardashīr continued to use the large, barrel-vaulted *īvān*, the most distinctive feature of late Parthian architecture, but employed it in a different way. He built it on an even larger scale and used it as an outer reception area leading into an audience chamber. This new chamber was square in form, and, instead of being barrel vaulted as it would have been in the Parthian period, was domed. The circular roof was set on the square room by using a distinctive Iranian device, a cone-shaped squinch, in each corner. This unit of an entrance *īvān* leading into a domed chamber still forms an essential part of Iranian religious architecture today.

The plan of Qal'eh-i Dukhtar is logical and symmetrical. Making use of the contours of the site, it is built on three levels, with the entrance via a ramp on the lowest, a courtyard with a range of rooms probably serving as a barracks on the second, and another courtyard on the highest terrace leading to the imposing palace unit. The garden-palace Ardashīr built in the Fīrūzābād plain, known today as the Ātishqadeh (pl. 3), is similar in character. It is divided into two parts, the public rooms at the front looking out over spacious gardens and a spring-fed circular lake, and behind a typical Iranian courtyard house, probably serving as the king's residence. The public rooms, truly monumental in scale, consist of the same unit as that seen at Qal'eh-i Dukhtar, that is a long *īvān* leading into a square chamber. However, at the Ātishqadeh there are three domed audience chambers, set side by side, which run across the width of the building, and there is also a second storey.

3. Plan of Ātishqadeh, Fīrūzābād.



To complete these enormous structures within a reasonable time-span Ardashīr used the material most readily to hand, loose stones held together by a quick-setting gypsum mortar. This mortar sets so fast that it holds bricks or stones almost as soon as they are placed in position. Its application as a building mortar (it was previously used for stucco) had revolutionised Parthian building techniques and had made possible the development of the huge barrel-vaulted *īvān*, which was built without scaffolding. However, while Sasanian rubble walls were economical and quick to build, their surface was rough and required finishing in some other medium. Here again, as in the plan of his buildings, Ardashīr decisively changed the standard scheme of palace decoration from that current in the late Parthian period. As has been shown in Parthian levels at Assur[4] and more recently at the mountain stronghold of Qal'eh-i Yazdigird,[5] Parthian architectural decoration was ornate and gaudy. Ardashīr's preference for relative austerity – also evident in his rock reliefs – is shown by the decoration he chose to cover the walls. The long expanses of the external walls are broken up by a regular series of buttresses, the changing shadows of which make



4. View of room showing niche with cavetto cornice in Ātishqadeh.

attractive patterns in the strong light, a tradition long followed in the Near East. The internal walls are left plain except for a series of deep, arched niches above which were placed 'cavetto' cornices, moulded in stucco (pl. 4). These had been copied from the door and window lintels of the Achaemenian palaces at Persepolis, whose huge stone ruins were, of course, familiar to Ardashīr – they are close to his home town of Istakhr – and their use was, doubtless, a subtle reminder of his claim to be of Achaemenian descent.

THE COINS OF ARDASHĪR

While these two buildings illustrate Ardashīr's response to the need to develop a new style of architecture, the evolution of the coinage during his reign illustrates the gradual formation of a distinctive Sasanian style. Ardashīr minted no less than eight different types of coin during his long reign.[6] The earliest is closely modelled on late Parthian types, and may well have been minted when he was still a Parthian vassal. It shows him full-face, with a beard and bushy bunches of hair, and wearing a high, jewelled Parthian hat with diadem and earflaps. He is still wearing the Parthian hat in his second type of coin, although he is shown in profile rather than frontally in the Parthian manner (pl. 5). In his principal issue – and on his rock reliefs – Ardashīr wears his personal crown: this consists of a simple skull-cup, tied with a diadem with long ribbons and surmounted by a high globe or *korymbos*, probably formed of a ball of hair covered with a silken cloth (pl. 6). It is thanks to the idiosyncracy of each Sasanian king devising his own unique crown[7] that we are able to identify most of the monarchs represented on the rock reliefs and on other works of art. Numismatists date the type of coin showing Ardashīr with his crown to the 230s, and, if this dating is correct, then his images on the rock reliefs probably all date to his later years.[8]





5 and 6. Two Coins of Ardashīr. 5. in Parthian hat; 6. standard issue.

THE ROCK RELIEFS

The idea of commemorating or advertising an event by cutting a sculpture on a cliff was an old one dating back at least to the third millennium BC, and flourishing again in late Parthian Elymais in the south-west.[9] What is new about Sasanian rock reliefs is their scale and number. The majority of them, nearly thirty, are sited in the Sasanian home province of Persis and date to the first hundred years of Sasanian rule.[10] There are three more rock-cut monuments of the 4th and 6th centuries at Tāq-i Bustān near Kirmānshāh,[11] as well as an atypical early relief at Salmas in Āzarbāījān.[12] The majority of these reliefs record only two themes, both of which were initiated by Ardashīr, either the investiture of the king by a deity, usually Ahurā Mazdā, or the king triumphant over his enemies. Both themes are



7. Detail of Investiture of Ardashīr I, Naqsh-i Rustam.

8. Head and chest of Ardashīr I from Fīrūzābād Joust.





9. The third knight at Fīrūzābād.

combined in Ardashīr's magnificent sculpture at Naqsh-i Rustam,[13] near Istakhr (pls. 1 and 7). This relief is considered by many to be *the* masterpiece of Sasanian sculpture. The heraldic composition shows a pair of horsemen facing each other, one handing the other a ribboned circlet. The horses' necks are arched and bent, their ears touch, between their legs lie two corpses, while behind the king stands his fan-bearer. The sculpture is carved in such high relief that it is almost in the round. The curving bodies are further dramatised by being highly polished and set against a background that has been left rough. Details of dress and harness are carefully represented, but they are shown in low relief and are simplified and subordinated to the overall design. The sculpture is thus characterised by the same qualities of monumentality, symmetry and austerity as can be seen in Ardashīr's architectural works, and are a coherent personal expression of his vision of order and kingship.

We are fortunate that there is no doubt about the identification of the two principal figures, and therefore of the significance of the scene, for inscriptions in Middle Persian and Greek, carved on the shoulders of the two horses, identify their riders as the god Hurmizd or Ahurā Mazdā, the supreme deity of the Zoroastrian faith, and 'the Mazdā-worshipping God Ardashīr, King of Kings of Iran'. Following from this the corpse beside the god's horse must represent Ahuramazda's opposite, the Spirit of Evil, Ahriman, while the other is the defeated Parthian King Artabanus V, also identified by the device on his hat.

Another of Ardashīr's masterpieces is less well known than the Naqsh-i Rustam scene. It is a magnificent 18-metre long frieze[14] set beside the old Sasanian road which wound its way along the mountain towards his palace at Fīrūzābād. This relief is unfortunately difficult of access and poorly preserved, but enough remains to show the dynamic composition and

10. Views of Bīshāpūr, Roman Victory of Shāpūr I.

fine modelling of the figures. It depicts the actual moment of victory in the great battle when Ardashīr challenged his Parthian suzerain. Three Sasanian knights in full armour, one behind the other, gallop to the right. They are engaged in vigorous combat with the Parthians. The leading pair have overturned their opponents and horses, while the third has grappled with his foe and swept him off his horse. In typically Sasanian manner, while the horses are shown in violent movement, their riders are impassive, unmoved either by the heat of combat or the thrusts of their lances. Thanks to the distinctive devices carried on helmets and caparisons, it is possible to identify the various participants. In the lead is Ardashīr (pl. 8), while the Parthian king, Artabanus, is shown falling to the ground, already slain. Behind is Ardashīr's son, Shāpūr, who, according to later traditions, unhorsed the Parthian Grand Vizier, Darbendan. The third knight was high in Ardashīr's favour and is represented on all Ardashīr's reliefs (pl. 9). He can be recognised by the floral device on his hat at Naqsh-i Rustam, where he is shown standing behind the king.



SHĀPŪR'S TRIUMPHS OVER THE ROMANS

The principal sculptural stimulus during the reign of Ardashīr's son and successor, Shāpūr I (241–72), was provided by the serious defeats he inflicted on the Romans. Successful confrontation had already begun on the western frontier in Ardashīr's reign. Indeed, with Ardashīr's declared aim of recreating the former Achaemenian empire it was inevitable. Shapur's campaigns culminated in the capture of the Roman Emperor Valerian at Edessa in 260, together with his army. Valerian was never ransomed and died in captivity, the only Roman emperor to meet so ignominious an end. Shāpūr recorded these triumphs in a rare and important inscription carved on the walls of the Achaemenian stone tower, the Kaʿba-i Zardusht at Naqsh-i Rustam, as well as illustrating them in a series of rock reliefs. The most imposing of these is set on the cliff at Naqsh-i Rustam,[15] almost opposite the Kaʿba. The king, seated on a massive charger, is shown more than twice life-size (pl. 11). In front of him are two Romans, one pleading, the other with his hands grasped by the king. This scene is usually considered to epitomise Shāpūr's Roman triumphs, and the two Romans are identified as Philip the Arab, who was forced to pay a heavy ransom in 244, and Valerian, whom Shāpūr captured with his own hand. The composition is triangular in form with the emphasis placed on the enormous figure of the king and on the pleading Roman. In contrast to the almost stark technique of his father's reliefs, much stress is placed on fluttering and billowing clothes. The cloaks of both the king and the kneeling Roman flutter out behind them, blown in opposite directions. The king's clothes are carved in a complicated mass of curves, pleats and folds. But this fussiness is overshadowed by the huge size and massive depth of relief of the figures. Although poorly proportioned in detail, the overall impact is considerable and the message of the all-conquering hero-king unmistakable.

Three more versions of Shāpūr's victories over the Romans were carved in the rocky Bīshāpūr gorge,[16] where the Shāpūr river cuts through the mountains and runs out into a wide and fertile plain on which Shāpūr built his favourite city. One of these reliefs is much the same size as the Naqsh-i Rustam sculpture but is its sculptural opposite. Instead of only 4 figures it contains no less than 202, carved on a strongly concave panel. To fit all these figures into a single panel, they had to be considerably smaller in size and stacked in registers, one above the other (pl. 10). The most plausible explanation for such a dramatic change of sculptural direction is the employment of a new, probably foreign, designer. Multi-register, small-scale sculpture is, of course, a feature of Roman art, and Roman influence is strong at Bīshāpūr. Even the actual plan of the city itself is the Roman rectangular grid rather than the circular plan of Fīrūzābād. The fine masonry of two structures in the city suggests the employment of Roman masons. One of these, a commemorative monument set up by a governor of Bīshāpūr,[17] was typically Roman, consisting of three pedestals, on two of which were set columns while on the third was a statue of the king. The other masonry structure is a semi-subterranean temple, which consists of a square central area surrounded by a narrow vaulted passage or ambulatory. One of the many interesting features about this building is the elaborate system of channels linking it to the river, enabling it to be inundated. This suggests it may have been built in dedication to the water goddess, Anahita.

Further evidence of Roman influence at Bīshāpūr, were it needed, can be found in the fine mosaic floors unearthed in structures adjacent to the Anāhitā temple.[18] Showing both typically Roman motifs, and those more to Sasanian taste, the mosaics would almost certainly have been made by Roman craftsmen, probably recruited from among the thousands of prisoners whom Shāpūr settled throughout his territories (pl. 12).

Thus, a Roman designer for this exciting and atypical sculpture is entirely plausible.[19] The overall composition is effective, with the figure of the king emphasised by the blank

11. Roman Victory of Shāpūr I, Naqsh-i Rustam.



panels above and below. Behind him are the serried ranks of the Sasanian cavalry (pl. 13), many of them of royal blood, as is shown by their distinctive head-coverings. Facing him are representatives of those he had conquered both in the west and the east. Pride of place is given to the Romans, who occupy much of the central register as well as the two lowest. Representatives from the East are shown in the central and upper registers. They bring gifts, including an elephant, a pair of felines, and what may be intended to represent bolts of silk.

The actual design is tense, with complex groups of crossing figures. The curve of the panel is used to enhance an impression of life and movement. The horses on the left look as if they are about to step out of the stone, while on the right the disgruntled Romans stand with their backs to the onlooker. The emphasis on expression and movement, the unusual poses and the small scale are all deviations from typical Iranian sculpture. However, while the 'foreign' elements of the relief have been stressed, the fact remains that the relief is an entirely Sasanian work of art, expressing Sasanian concepts of kingship and victory and written in the standard Sasanian vocabulary.

While the monuments from Fīrūzābād and Bīshāpūr enable us to document some of the changes in the art and architecture of the two founders of the empire, our information thereafter is less satisfactory. There are no new cities or buildings which can be attributed to the unimpressive kings of the next forty years, apart from a ruined commemorative tower built by Narseh (AD 293–302) at Paikuli in Iraqi Kurdistān,[20] which is of little use in trying to reconstruct a history of architecture. There are, however, a few rock reliefs belonging to these years, and these not only illustrate changes in style and fashion, but more importantly



13. Sasanian Cavalry, Bīshāpūr.

reveal the preoccupations of some of the kings. Battle was the predominant theme of the early 4th-century reliefs at Naqsh-i Rustam,[21] which show Sasanian kings in full armour jousting with and killing their enemies in scenes reminiscent of Ardashīr's great Fīrūzābād joust. This emphasis on victory may well have been an attempt to ignore the relative weakness of the Sasanian military position after the death of Shāpūr. Bahrām II (276–93) had been defeated by the Roman Emperor Carus, who succeeded in reaching Ctesiphon in 283, and Narseh's family had been captured by Galerius.

Bahrām II almost certainly achieved the Sasanian throne not by being next in line but by political intrigue, probably led by the principal priest, the Mobad Kerdir, who can be seen in all except the first of Bahrām's reliefs.[22] His dependence on Kerdir and the nobles, together with his military defeats, weakened his effectiveness as a monarch. The themes of his reliefs are novel, and are mostly concerned with internal issues. They show the king surrounded by members of his family and by high court dignitaries. This obsession with family affairs is echoed in his coinage,[23] and on a silver bowl found in Georgia, where he is shown with the queen and two of his sons.[24] The queen is also shown on a relief carved on a mountain at Sar Mashhad,[25] although the king is the focal point of this dramatic composition, in which he slays a lion (pl. 14). In typical Sasanian manner, the lion is shown twice, first springing at the king and then lying dying at his feet.



14. Lion hunt relief of Bahram II, Sar Mashhad.

12. A Bīshāpūr mosaic.



15. The Mtskheta bowl, drawing of detail.

The slaying of wild beasts by the hero-king has a long history in the art of the ancient Near East. It was a popular Sasanian motif, used on wall paintings and stucco as well as to decorate the best-known Sasanian artefacts, their magnificent silver vessels. These are widely represented in museums and private collections throughout the world. Unfortunately, few have been found in archaeologically recorded contexts, and their study has been further complicated by their popularity. Not only were they given by the reigning monarch to contemporary rulers and on special occasions to his nobles, but they were also traded extensively. Furthermore, copies were still being made over a wide area long after the end of the dynasty. The issue has been still further confused by modern forgeries. However, real progress in the study of Sasanian silver has been and still is being made by Prudence Harper.[26] Using traditional art historical techniques combined with metal analyses, she has succeeded in establishing a sequence for many of the vessels. She considers that early Sasanian silver consisted mainly of simple bowls decorated with the bust of the owner in the centre. There is a fine example of this from Mtskheta, Georgia, showing a male bust over an acanthus-leaf base (pl. 15).[27] These medallion bowls were made from ores with varied analyses in numerous workshops. In this early period, too, members of the nobility also sometimes showed themselves hunting. However, this 'laissez-faire' attitude to silver production was dramatically changed during the long reign of Shāpūr II (309–79), when Harper suggests that silver production was brought under a state monopoly, in effect 'nationalised'. Vessels which can be dated to the mid-Sasanian period are all similar in form, weight, design and, most strikingly, in the composition of the ore, which must have come from a single source. Furthermore, only the king could be portrayed on these plates.

A fine example of a product of these workshops is the hunting plate portraying Shāpūr II (pl. 16). The king, identified by his crown, is galloping to the right, shooting with a bow and arrow at two boars, one in front of the horse and the other below. As with the lion hunt relief, this almost certainly represents two stages from a single hunt, the shooting of the boar, followed by the same beast shown dead. The monopoly which Harper suggests Shāpūr II imposed on the production of silver vessels corresponds with other evidence from his reign. Although little is known of events during his first thirty years, he then succeeded in reasserting the authority of the monarch and curbing the excessive powers of the nobles and clergy. This same strengthening of central authority was also enforced on craftsmen, who were organised into guilds, each with an elected head. Superintending the guilds was a 'chief of artisans', appointed directly by the king.[28] His duties included the supervision of both royal and provincial workshops.

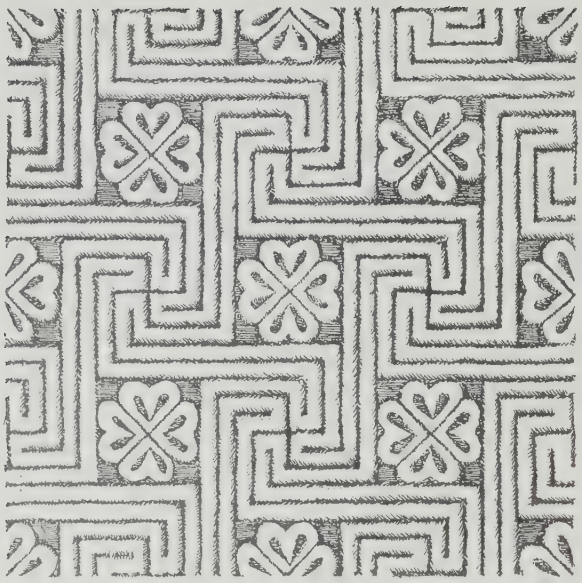
The silver hunting plate is an indication of the high standards achieved during Shāpūr's reign. The controls he imposed would undoubtedly have led to similar quality in other crafts. The weaving of silks was, for instance, greatly improved by the importation of Syrian craftsmen. Shāpūr was successful militarily both in the west (he killed the Emperor Julian the Apostate) and the east against the Kushans, and craftsmen with new ideas and techniques would have been available from both areas. Indeed, the 'paired line' method of representing drapery on the silver vessels introduced at this time is almost certainly the result of Kushan influence.[29] Unfortunately, however, little material that can be certainly attributed to Shāpūr II has yet been found, partly because few Sasanian sites have been excavated. Although some scholars consider that some rock reliefs both at Bīshāpūr and Naqsh-i Rustam[30] were commissioned by Shāpūr II, this is disputed and there are none that can definitely be attributed to him. Indeed, during his long reign there seems to have been a major change both in the geographical focus of the dynasty and in their preferred forms of official art. The importance of their original homeland, Fārs, seems to have declined. The few later rock carvings of the dynasty are at Tāq-i Bustān near Kirmānshāh, strategically located on the main East-West highway and not far from their capital at Ctesiphon.

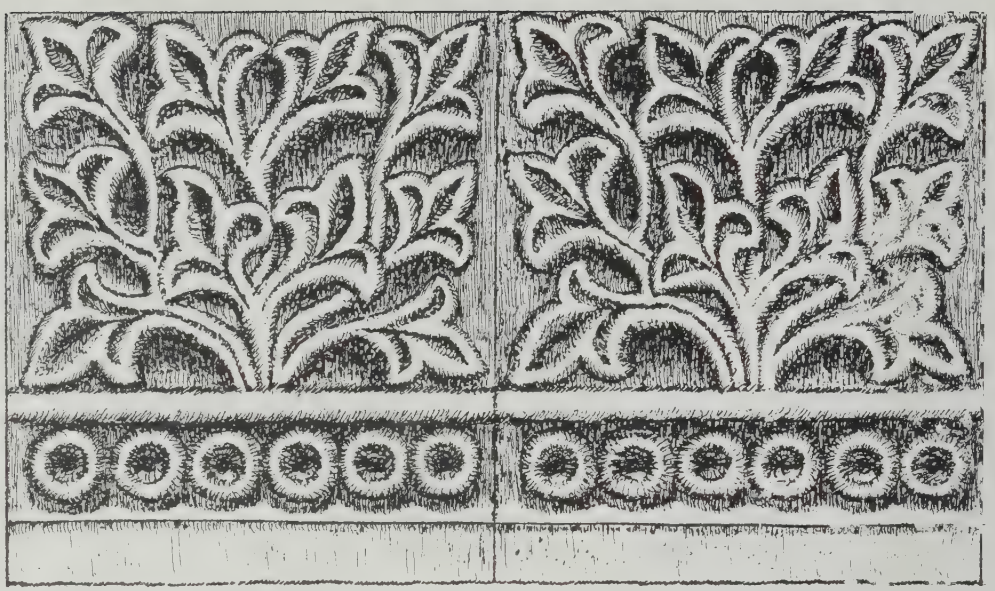
DECORATION IN STUCCO

The recent discovery of a Sasanian building decorated with stucco busts of Shāpūr II near Darabgird[31] may indicate the direction in which official art moved – from rock reliefs placed in the open to a colourful tapestry of stucco decorating both the interiors and the exteriors of Sasanian palaces. Stucco has been found in 5th-century Kish and 6th-century Ctesiphon in Mesopotamia and from late Sasanian Dāmghān and post-Sasanian Chal Tarkhān in the north.[32] Despite the centuries separating their production, the designs at all these sites are relatively similar. Stucco was used to outline the arches of *īvāns* and to decorate their walls. Busts were also keyed into courtyard walls. Since Sasanian stucco panels were usually

16. Hunting Plate of Shāpūr II, Freer Art Gallery.







17–20. Stucco panels from kish.

17. Meander motifs.

18. Floral pattern.

moulded rather than carved as in the preceding Parthian and following Islamic periods, they could be applied to walls like tiles to form a closely textured, repetitive frieze of any required height and length. Both decorative and figural motifs formed part of the Sasanian repertoire. In pl. 17 an attractive repeating frieze is built up by combining a meander pattern with stylised floral elements. Plant designs are particularly characteristic of Sasanian stucco (pl. 18). An attractive example from Kish shows a series of pomegranates framed by pairs of leaves (pl. 19). Another motif used to frame the central element of the design was a pair of wings, as in the plaque with the rams's head from Kish (pl. 20). Alternatively the design might be set within a roundel, like the stylised boar's head from Dāmghān. Another familiar Sasanian convention was to tie ribbons round the necks of animals and the stems of plants (pl. 21).

It would have been difficult to reconstruct the decorative scheme of an *īvān* only from excavated stucco. However, we are fortunate that the last and most impressive rock-cut monument of the dynasty illustrates the appearance of a late Sasanian *īvān*. The Great Grotto at Tāq-i Bustān is an *īvān* cut out of the living rock of the mountain and decorated on the facade, as well as the side and back walls (pl. 23). Unfortunately, the date of this monument, the most important of the late Sasanian period, is uncertain, because of ambiguities in the carving of the king's crown. It is, however, usually attributed to the last great king of the dynasty, Khusrau II Parvīz, the Victorious, who reigned from 591 to 628.

19. Pomegranate design.

20. Ram's head.







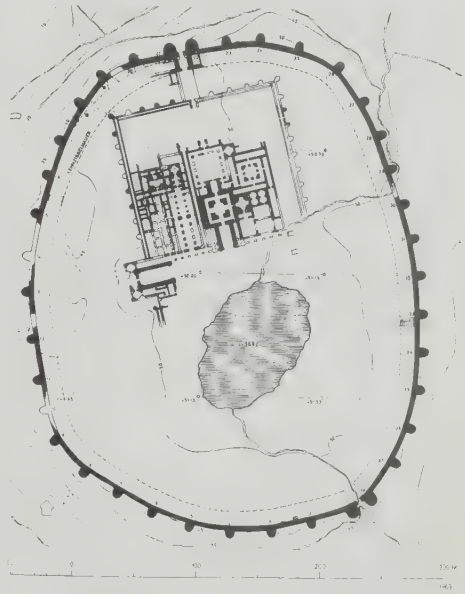
21. Stucco Rider on Stag from Darab.

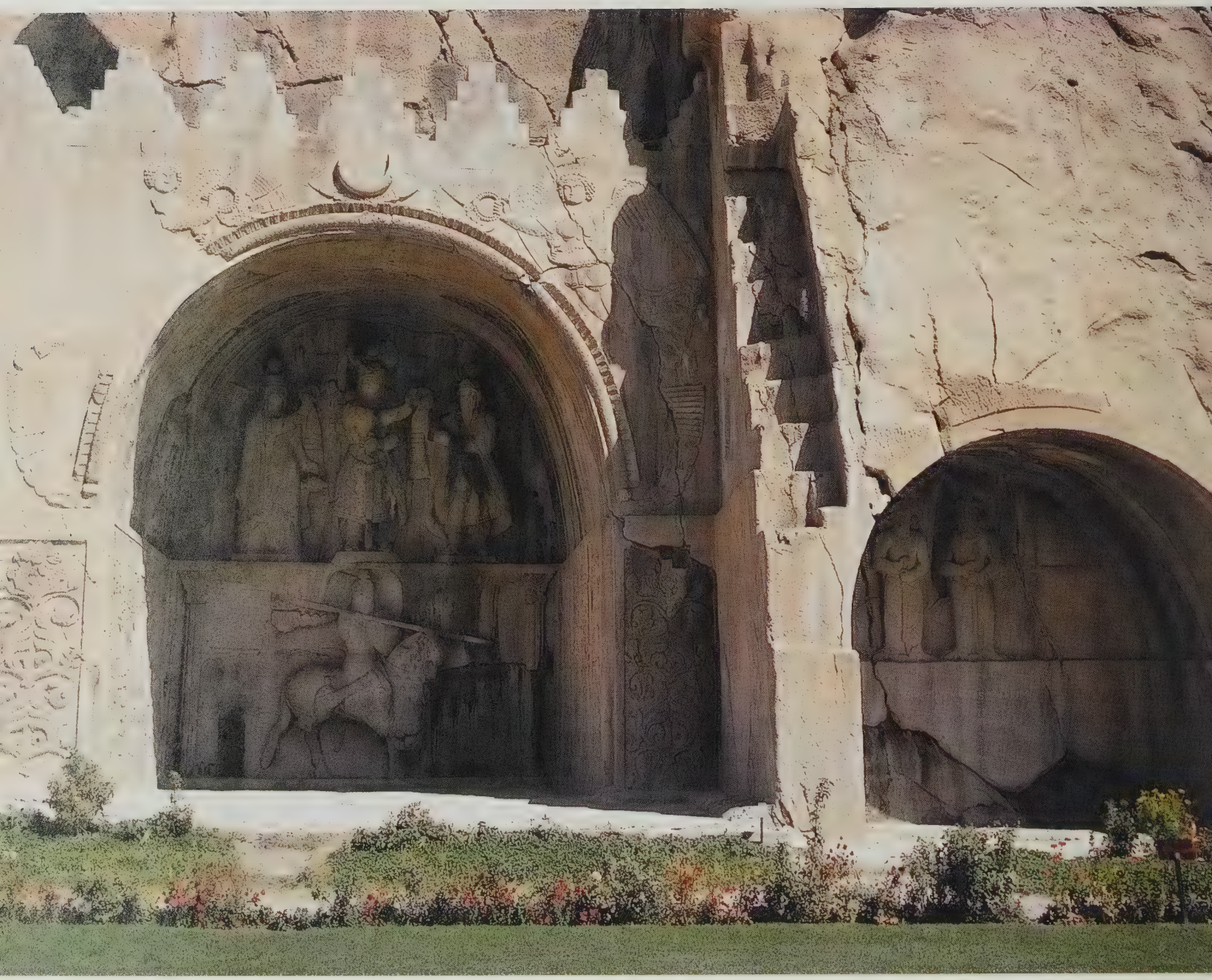
THE TWO KHUSRAUS

It was the two Khusrau's, Khusrau I Anūshīrvān, of the Immortal Soul (531–79), and Khusrau II, who restored Sasanian fortunes after the disasters and decline of the 5th century. Khusrau I had first to revitalise the empire before he was able to reform the army and avenge defeats in both the east and west. By the time he died the kingdom was stronger and richer than ever before. Khusrau II nearly fulfilled the dreams of their founder Ardashīr I of restoring the boundaries of the Achaemenian empire, for he carried Sasanian arms further west than ever before. In an incredible series of campaigns Jerusalem fell and Constantinople was under siege. But Khusrau II had over-extended his armies and exhausted his people by punitive taxation to maintain his luxurious court, well illustrated at Tāq-i Bustān. When the new Byzantine Emperor Heraclius (610–41), in a brilliant tactical move, abandoned his besieged capital and sailed up the Black Sea to attack Khusrau's homeland from the rear, he met little resistance. In a few years Heraclius marched through the western parts of Iran and Mesopotamia, sacking the great religious centre at Takht-i Sulaymān and Khusrau's favourite palace of Dastagird among many others. The Sasanian empire never recovered and a few years later fell an easy prey to the Arabs.

Monuments attributable to the two Khusrau's and thus to the late Sasanian period are essentially architectural, for the fabulous treasures of their palaces were thoroughly plundered. Most of the surviving buildings at the sanctuary of the Warrior's Fire, Atur Gushnasp, at modern Takht-i Sulaymān[33] in the north-west probably date to the time of Khusrau I. This great walled city, oval in form (pl. 22), is set in a fertile and mountainous region, an unusual feature of which are the numerous mineral springs of the area. The waters are so rich in minerals that they leave hard stony deposits where they flow. Over the centuries the bowls of the springs form hills, and it was round just such a hill, the spring now forming a large deep lake, that the city was built (pl. 24). The city was bisected by the Processional Way which ran from the North Gate into the Sacred Precinct and through the principal fire temple to the lake. Although most of the buildings were constructed of stone, this temple was built of baked bricks. *Īvāns* to north and south led into the domed cella, the dome being carried on four huge brick piers. A monumental *īvān* to the west looking out across the lake served as the king's principal chamber of audience.

22. Plan of Takht-i Sulaymān.





23. General view of the Great Grotto, at Taq-i Bustān.



24. Aerial view of Takht-i Sulaymān.

The ruins of the largest Sasanian *īvān* still stand at Ctesiphon[34] and almost certainly once formed part of the most famous Sasanian building of all time, the mighty palace of Khusrau I. Originally two huge *īvāns* faced each other across an enormous courtyard, but today only half the facade of one of these remains although as late as 1888 the complete facade was preserved (pl. 25). This *īvān*, known as the Tāq-i Kisra or Arch of Khusrau, is nearly twice as large as those Ardashīr built at Fīrūzābād and is one of the largest arches ever built without scaffolding, measuring some 35 metres in height, 25 metres in width and 50 metres in length. To withstand the enormous thrust of this huge vault, so large that it dominates the flat plain surrounding it, the Sasanian builders constructed immensely thick walls of baked bricks. Even the crown of the vault measured a metre, while the walls were some 7 metres thick at the base. To compensate for the great void of the arch the facade was richly decorated with several stories of blind architecture strongly reminiscent of Parthian Assur. Like so many Sasanian buildings, apart from a little of the facade, only the skeleton has survived, and we are indebted to Arab geographers for a description of its former glory. Khusrau brought back marble slabs, plundered from the Christian church at Antioch, to cover the floor and lower walls, while above were a series of magnificent glass mosaics showing Khusrau at the siege of that city. His enormous throne, the Takht-i Taqdīs, was placed at the back of the *īvān*, and his massive crown suspended by a chain from the ceiling.



25. View of the Tāq-i Kisra at Ctesiphon, drawn by Captain Hart, 1824.

The appearance of the king in this final century of Sasanian rule is fortunately preserved for us in the superbly detailed carvings on the walls of the *īvān* at Tāq-i Bustān.[35] The decorative theme of the *īvān* is, of course, the king, shown in his various roles, the traditional roles of any oriental monarch: an intermediary with the gods, a warrior and a hunter. Illustrating the first is the final version of the Sasanian investiture scene. Set on a raised shelf on the back wall the king is shown standing between two deities, Ahurā Mazdā on his left, Anāhitā on his right. Both offer him diadems, only one of which he can accept (pl. 26). It is hard to believe that this clumsy scene, lacking coherence because of its determination to make the king pre-eminent, can have been designed by the same sculptor as that of the superb knight on his charger below. This mighty warrior in full armour and equipped with the long jousting lance is a magnificent and menacing record of the might of the Sasanian army, at that time pre-eminent throughout the Middle East (pl. 27). So overwhelming had been the force of Sasanian arms that the mere depiction of the warrior king was sufficient. There was no need to show any opponent as their total defeat would have been assumed as a matter of course. On the side walls the king is shown in the last of his roles, the royal hunter engaged in the ritual slaughter of wild beasts (pl. 28). As usual, these two hunts take place within a fenced park or 'paradise'. Men on elephants drive the game towards the king, and others collect the dead beasts on the far side. In the boar hunt, which takes place in the marshes

26. The investiture scene in the Great Grotto.





27. The knight in the Great Grotto.

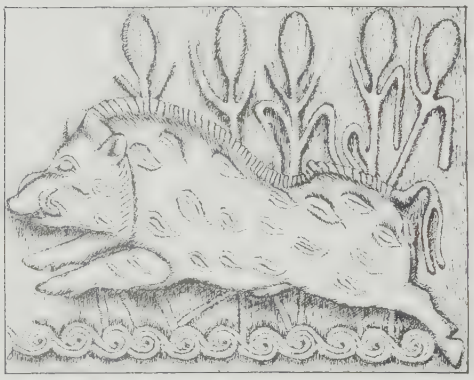


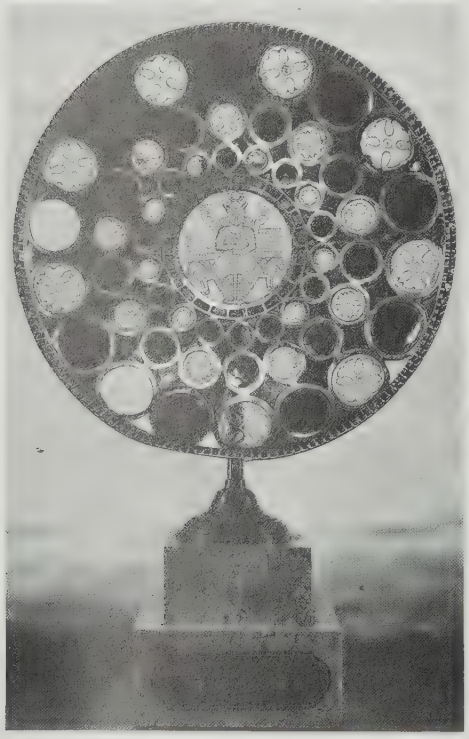
28. The boar hunt scene, Tāq-i Bustān.

29. (detail) The king in the boar hunt scene.

30. Elephants and riders, Tāq-i Bustān (*senmurv* can be seen on tunic of main rider).

31. Running boar stucco from Ctesiphon.





(pl. 29), the king and his followers, splendidly dressed, are seated in the royal barges and framed by a dense mass of fleeing boars. Khusrau, shown much larger than his companions, appears twice, first shooting and then at rest. He is accompanied by courtiers and musicians playing harps. Except for the royal barges everything is shown in motion. The elephants are running, trampling plants beneath their feet (pl. 30); the falling dying boars are realistically portrayed, as are their lifeless bodies slung over the elephants on the right.

There is good reason to believe that all the elements shown at Tāq-i Bustān were stone versions of scenes more usually worked in stucco. Fragments have been found of figures and horses in the round[36] similar to those on the back wall, and a comparison of the Tāq-i Bustān boars with the Ctesiphon stucco of pl. 31 illustrates that hunting scenes were also part of the stucco artist's repertoire. Fragments of diadems like that used to outline the arch at Tāq-i Bustān have been found at Kish, Ctesiphon and Dāmghān,[37] and they were probably a standard unit of decoration.

The Tāq-i Bustān sculptures are not only fine works of art in themselves, but they also serve as primary documents for other branches of study. In addition to information about court ritual, musical instruments, weapons, methods of hunting, etc., they are the single most important source for late Sasanian textiles and jewellery. The form of the garments worn and the motifs which decorated the fabrics are carefully recorded, as are the jewels. The sheer wealth of jewellery worn by the king is illustrated in the investiture scene. In addition to his massive crown, earrings, collar and rings, he wears a jewelled chest harness, belt, sword belt and scabbard, and even his clothing is jewelled. These jewels would have





been highly coloured, as is suggested by the colourful inlays of the famous 'Cup of Khusrau' (pl. 32).[38] Here the clothes of the enthroned monarch carved on the central roundel of rock crystal are also richly ornamented with heavy embroideries and appliqués. The principal motif on the king's coat in the boar hunt on the side wall of Tāq-i Bustān is the famous *senmurv*, a mythical creature, part dog, part lion and part bird (see pl. 30), while the clothes of his companions and of the men riding the elephants are decorated with floral motifs and birds (pl. 33).

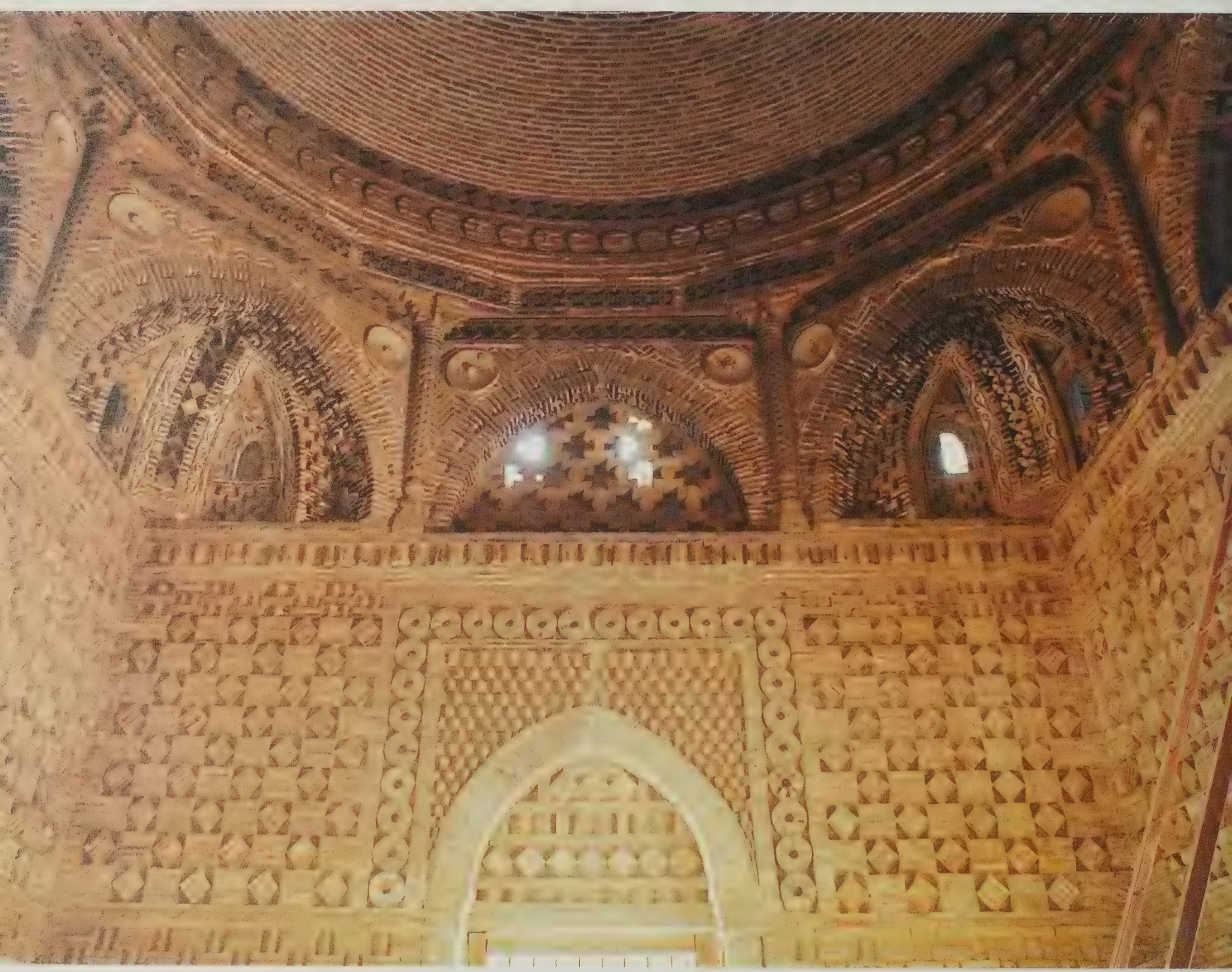
Sasanian art was created as a deliberate act of policy by the founder of the Sasanian empire, Ardashīr, who established its basic format. Many concepts and motifs were derived from the deep well of the ancient Orient, but there was also considerable Graeco-Roman influence, together with a less well-documented input from the East. These varied themes continued to interact to varying and fluctuating degrees throughout the four centuries of Sasanian rule. Although Sasanian art was essentially the art of the monarch, and much of it was concerned with the representation of royal images, it also employed a wide range of plant, animal and bird motifs, many if not all of which were used symbolically. This artistic language, the interpretation of which is as yet little understood, was widely applied throughout the empire to many different types of object worked in a variety of materials, stone, stucco, silk or other woven cloths, and seals (pl. 34), and it was instantly recognisable.

So aesthetically successful and widely accepted was the art and architecture of the day that it continued in use long after the last weak king had fled. Slowly adapting to changing conditions, its influence spread East and West along the trade routes. Sasanian motifs can be traced in Central Asian paintings and textile designs, in Tang pottery and in designs on silks made in Egypt and Byzantium, themselves widely traded. But their influence was not confined to the art of the day. Sasanian concepts of kingship and chivalry, and Sasanian methods of warfare were to have a profound effect on medieval Europe.

34. Seals from the British museum, London, 11994, 119564, 119486, 119825, 119980 and 119962.

32. The 'Cup of Khusrau', Cabinet des Médailles, Bibliothèque Nationale, Paris.

33. Elephant and riders, Tāq-ī, Bustān, showing floral motifs and birds.



6 THE ISLAMIC ARCHITECTURE OF PERSIA

INTRODUCTION

THE VITAL ROLE of Persia in later Islamic architecture makes it peculiarly frustrating that so little survives from the early Islamic centuries, although Persian elements bulk large in Umayyad and early 'Abbasid architecture.[1] The first substantial body of surviving monuments dates from the 5th/11th century, and by that time the transition from Sasanian to Islamic modes was well-nigh complete. As well as the sheer lack of buildings, their distribution presents difficulties. Each standing structure naturally acquires a significance out of all proportion to its original importance in the wider context of its times. Yet virtually all of these early buildings are found in small towns or villages off the beaten track: Dāmghān, Sidih, Fahraj, Nā'īn, Nīrīz. They owe their survival to their remoteness. These provincial buildings offer no clue to the vanished architectural splendours of the great contemporary Persian cities we know of from literary sources.[2]

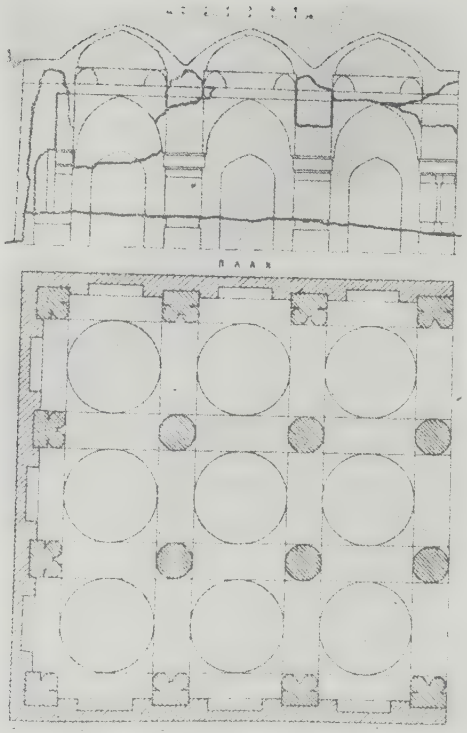
About twenty buildings datable to before 390/1000 survive,[3] though often the early fabric is largely overlaid by later work. Nearly all of them are mosques; this seems broadly to reflect the building priorities of the time. Mosque architecture was evidently in a state of flux at this time, for these monuments illustrate a great many different types, even though the crucial change-over period of the 1st Islamic century is not represented. Alongside mosques of fairly straightforward hypostyle – traditionally termed 'Arab' – type (Dāmghān, Nīrīz, Sīrāf, Istakhr, Susa, Yazd, Shustar) mosques comprising a small domed chamber (and perhaps other, now vanished, elements) were produced, such as Qurveh, Yazd-i Khāst, and the Masjid-i Bīrūn, Abarqūh[4] or others consisting entirely of a covered and many-vaulted area (Hazāra and Balkh). Nīrīz, Bāmiyān and Nīshāpūr (Tepe Madrasa)[5] offer examples of the *īvān* used, with a courtyard, as a mosque. Some of these types deserve closer scrutiny. It will be seen that the commonest category is some variant of the hypostyle mosque. But the deviations from this model are instructive.

First, none of the Persian examples can rival the standard Arab mosque for size – perhaps because the Arab mosques were located in cities and the Persian ones usually in smaller settlements. Larger mosques were built but are either entirely lost (Nīshāpūr, Mutarris mosque) or irretrievably denatured (Shīrāz Jāmi'). The Iṣfahān Jāmi' is the best surviving example.

Secondly, Persian elements infiltrate the execution of the plan even if traditional emphases remain. At the Tārīk Khāneh at Dāmghān and the Yazd and Iṣfahān Jāmi' the central aisle of the *qibla* facade is wider than the others. It was probably elevated above them at roof level (as at Nā'īn) by a rectangular frame, a miniature *īvān* heralding a processional axis in the Sasanian spirit. A preference for vaulted rather than flat roofing characterises most mosques (e.g. those at Dāmghān, Nā'īn, Fahraj and Simnān) and represents the prime Sasanian heritage: the use of curvilinear forms like tunnel vaults and small domes. In lesser details of architectural vocabulary the Sasanian influence is equally patent: crenellations, cone squinches, huge bricks, elliptical arches and round piers.

Thirdly, these Persian hypostyle mosques illustrate numerous variations of the basic scheme. Some mosques maintain a narrow rectangular form and the single arcades on three sides of the courtyard serve to emphasise their greater concentration on the sanctuary (Dāmghān, Bīshāpūr and Sāveh). Nā'īn by contrast is conceived in horizontal terms; and Fahraj is square, with a double depth of covered space in the sanctuary. The Shustar Jāmi' is simply a columnar hall without a courtyard, as were probably the Susa and Simnān mosques. If there is a minaret in these hypostyle mosques it may be incorporated (Nā'īn), attached to the exterior fabric (Susa and Fahraj) or separated from it (Dāmghān). Sometimes the exterior is buttressed at regular intervals (Susa). Much smaller versions of these hypostyle mosques quickly became a regular feature (Dasht-i Dih, Fīrūzābād, Sīrāf, Nīshāpūr).

1. 'Tomb of the Samanids', Bukhārā, interior.



2. Mosque of Ḥājjī Piyādeh, Balkh (after Pugachenkova).

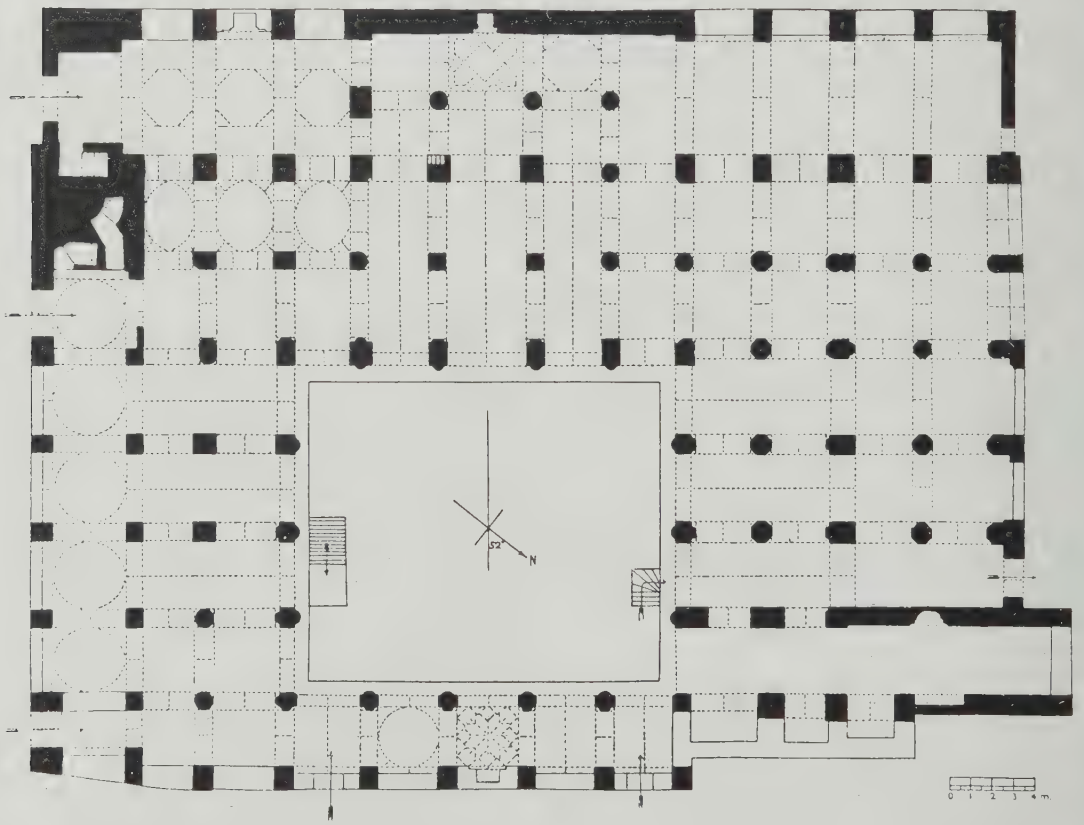
Several of these early mosques betray an imperfect appreciation of axial planning. The placing of the main entrance very roughly opposite the *miḥrāb*, but to one side of it, is remarkable.[6] Apparently Persian architects were slow to apply to the mosque those concepts of axiality which were central to Sasanian architecture. Only with the refinement of planning and structure in the Saljūq period was precise axiality revived.

An unusual type of enclosed multi-domed mosque known in small numbers throughout the Islamic world is represented in the Persian sphere by two major examples in Central Asia: the Ḥājjī Piyādeh mosque in Balkh (perhaps early 3rd/9th century), and the Masjid-i Diggarān at Hazāra, now dated to the early 5th/11th century. These mosques reflect local pre-Islamic manor-houses by maintaining a grid layout in plan but they dispense with it in elevation, preferring free circulation throughout to a cellular division of space.[7] The most striking feature of the Balkh mosque (pl. 2) is its rich stucco ornament, which reflects with astonishing fidelity two major styles of stucco carving known from ʿAbbasid Mesopotamia; the third, 'bevelled', style is not represented.

The material of these early mosques is varied. Mud-brick appears with remarkable frequency (Dāmghān, Sāveh and Fahraj). Shustar and Istakhr use dressed stone, while Yazd-i Khāst uses rubble. But the commonest material was already baked brick, of a quality often better than Sasanian work. This material was the crucial factor in the formation of a distinctively Persian Islamic architecture from the early 4th/10th century onwards.

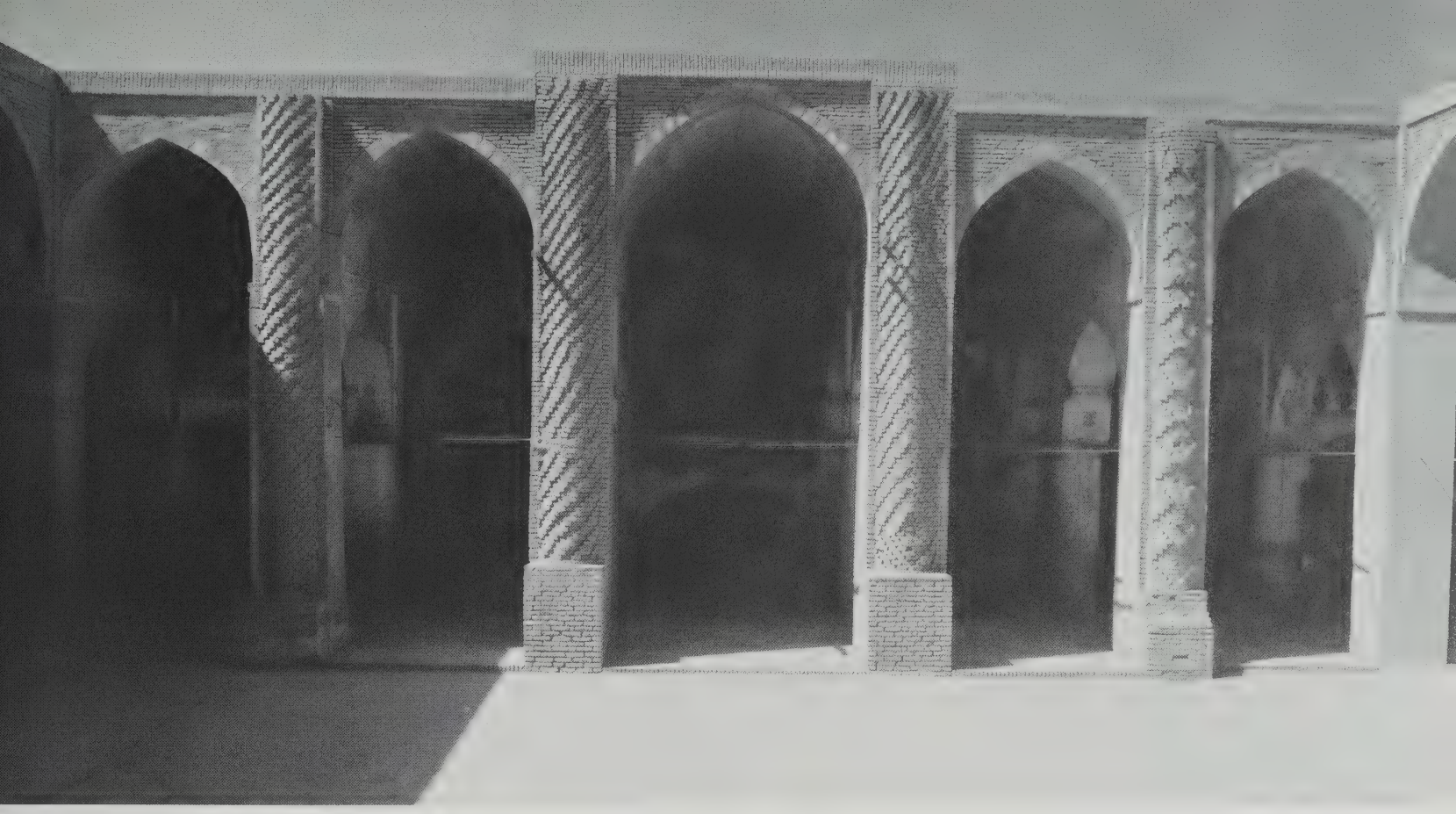
Lack of excavation has consistently hampered the dating of undecorated buildings and those without inscriptions, and has left unresolved the question of whether Islamic buildings were frequently erected on the ruins of earlier structures. Literary sources indicate that the Muslims did adapt *chahār tāqs* (fire temples)[8] and even Buddhist sanctuaries[9] for use as mosques, just as they used or built upon churches in Christian territory, Jain temples in India and Buddhist sanctuaries in Central Asia. Only diminutive examples of such converted *chahār tāqs* seem to survive, though it is arguable that the great Saljūq dome chambers owe something to the major Sasanian fire temples. The Sīrāf Jāmiʿ was raised over the ruins of a Sasanian fort,[10] while the Iṣfahān and Ardabīl Jāmiʿs rest upon as yet unidentified Sasanian structures.

The foregoing remarks demonstrate that too little evidence survives for a clear picture of the earliest Islamic architecture in Persia to emerge. A division into mosques of 'hypostyle', '*īvān*' and 'domed' type serves to categorise most mosques but by no means all, and imposes a false simplicity even on those buildings which seem to fall within the rubric. Before *c.*300/900 only two buildings with a claim to real distinction survive: the Tarī(k) Khāneh at Dāmghān and the Ḥājjī Piyādeh mosque at Balkh. But in the 4th/10th century central Persia



3. Friday Mosque, Nāʾīn.

Drawn by Eric Schroeder.

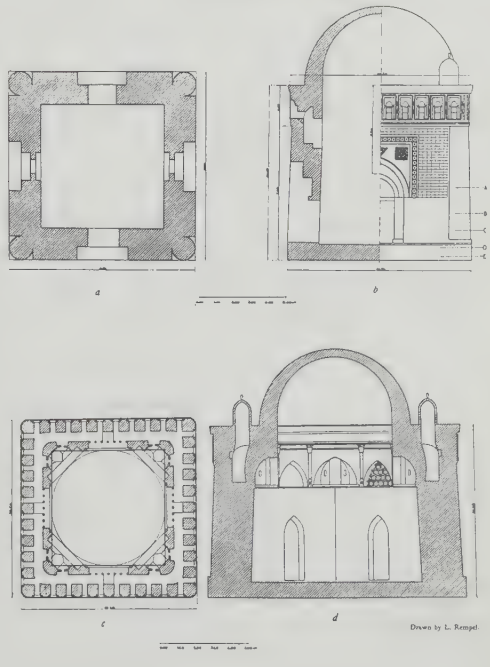


4. Friday Mosque, Nā'īn.

and Transoxiana produced some fine buildings foreshadowing Saljūq architecture in structure and ornament.

The buildings in the region of Iṣfahān are all mosques: Nā'īn (pl. 3), Ardistān and, in Iṣfahān proper, the Jurjīr facade and the Jāmiʿ itself. At Nā'īn (perhaps *c.*390/1000) the richest pre-Saljūq stucco decoration in Persia envelopes the area in front of the *miḥrāb*, the most sacred part of the mosque. In the courtyard facades ancient Mesopotamian modes of brick ornament are revived (pl. 4). Slight recessions and projections in the brick bonding suffice to form patterns of spirals and lozenges on the flat faces of the arcades.[11] This surface plasticity contrasts with the Dāmghān *qibla* facade whose projecting rounded piers give the illusion of functioning as buttresses and lend the sanctuary an embattled air. In the Iṣfahān Jāmiʿ similar decoration is confined to a few Buyid piers, including some of multi-lobed form, placed before the existing ʿAbbasid facade and thereby reducing the size of the courtyard slightly.[12] This functionally minor but expensive alteration gave the courtyard a decorative facade in the newest fashion. The entrance portal of the Jurjīr mosque (perhaps *c.*365/975) marks the apogee of this style.[13] Its combination of multiple reveals and lobed and horseshoe arches is, like its decoration, unique in its time. Brickwork is here coaxed, against all likelihood, into vegetal forms including stylised tree of life motifs. Stucco covers the underlying brickwork to render finer detail, a technique used a few decades later for Kufic inscriptions (Gunbad-i Qābūs; Simnān minaret).

5. 'Tomb of the Samanids', Bukhārā.



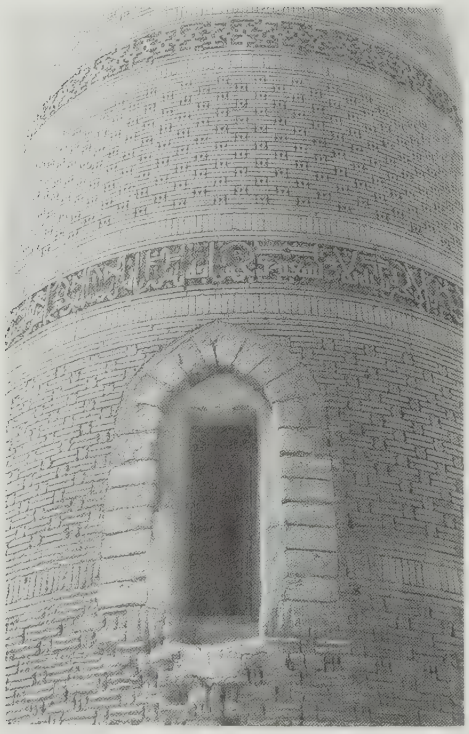
In Transoxiana the 4th/10th century saw a growing fashion for mausolea of domed square type. Amongst these the masterpiece is the 'Tomb of the Samanids', at Bukhārā[14] datable to before 332/943, and possibly the most epoch-making building in Persian Islamic architecture (pls. 1, 5–6). This tomb looks backward as well as forward. Its domed square form, its arched opening on each side, its lack of directional emphasis and the presence of an upper gallery with corner domes are all features with Sasanian antecedents (pl. 5). It is in short a fire temple in Islamic dress. But the Islamic detailing completely transforms the model while retaining its monumentality. It is a triumph of balance. Baked brick made this possible. No earlier Islamic or Sasanian building exploits the decorative potential of the medium with such splendid assurance. Every surface but the dome is decorated. Deep shadow lines are allowed to highlight key elements of the design. Tripled or quadrupled stretchers alternate with smaller bricks in vertical bond and by their greater mass dominate them. The heavy dome is emphasised by its unalleviated mass and by the pronounced batter of the bearing walls. The almost equally important Arab-atā mausoleum at Tīm[15] (apparently dated 367/977–8) hides the dome behind a high arched and framed portal (*pīshtāq*) with a monumental inscription. Attention is focused on the entrance facade while the other walls

6. 'Tomb of the Samanids', Bukhārā.

8. (*facing page*) Minaret of Friday Mosque, Dāmghān.



7. Minaret at Vābkent.



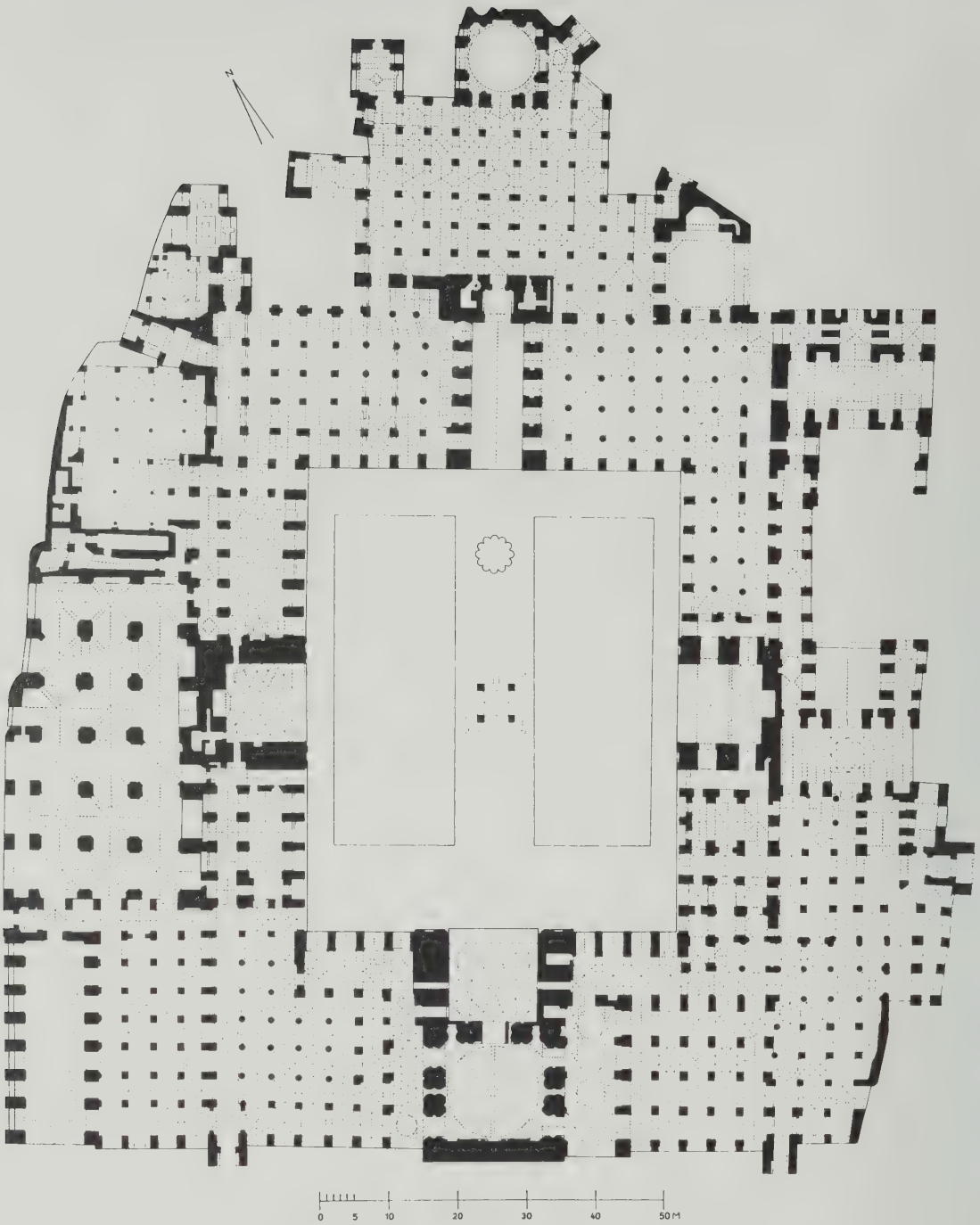
are plain. Internally, the busy multi-textured surfaces of the Bukhārā tomb and its somewhat compressed zone of transition are replaced by a much smoother interior surface in which a lofty zone of transition is given even greater vertical emphasis by the trilobed arch or squinch on each side of the octagon. In its use of the trilobed squinch and the inscribed *pīshtāq* the Tīm mausoleum presages later developments.

These domed squares were soon supplemented by another kind of mausoleum – the tomb tower. Pre-eminent in this category is the Gunbad-i Qābūs of 397/1006, a building of uncompromising severity whose clean lines and location on a tepe seem to magnify still further its already gigantic size.[16] No subsequent tomb tower approaches the scale of this, the earliest surviving of the series. Ten huge, evenly spaced, triangular flanges break free from the circular plinth and streak upwards to vanish into the smoothly corbelled cornice supporting the conical roof. The single slender arched doorway seems lost in the immensity of unbroken brickwork. Two identical inscription bands girdle the tower, one near the base, the other near the peak of the flanges – illegibly high and thus a symbolic presence only. They identify the patron as a minor local princeling. Similar patrons in this tardily Islamised area erected several contemporary cylindrical towers whose Pahlavi inscriptions readily evoked Sasanian memories. The austerity of these buildings sets them apart from brick tomb towers built from 442/1050 onwards whose surface patterning is more akin to contemporary minarets, and which are mostly polygonal in form. Perhaps the finest of these is an octagonal tower at Kharraqān dated 486/1093, with an originally double dome, staircases inside angle buttresses and an unrivalled series of nearly seventy external brick patterns. Most of these towers seem to have served as princely mausolea rather than the tombs of holy men.

The period around 390/1000 also saw, it seems, the introduction of a new type of slender cylindrical, baked brick minaret often resting on a polygonal plinth (pls. 7 and 8). Its varied



9. Friday Mosque, Iṣfahān.



features include flared balconies, whether corbelled (Sārabān minaret, Iṣfahān) or cavetto (minaret of Masjid-i ʿAlī, Iṣfahān); single or double internal spiral staircases (Khusraugird; Jām; Samīrān); a lower elevation with flanges (Nigār) or alternating engaged columns and flanges (Zarand) and – most spectacular of all – a tapered three-tier elevation (Ziyār; Jām). Some forty pre-Saljūq and Saljūq minarets survive; most display richly patterned brickwork.[17]

THE SALJŪQ PERIOD

The bulk of pre-Saljūq architecture consists, as shown above, of mosques. In the 'Saljūq' period – like 'Ilkhanid', a convenient dynastic label only – this is far from the case, for the mausolea and minarets already discussed survive in far greater numbers.[18] Nevertheless, mosques were still the major focus of architectural activity and the forum for experiment. The Saljūqs quickly broke the grip of the hypostyle plan on eastern Islamic architecture.[19] Henceforth such mosques were supplemented by single dome chambers (Sangān-i Pā'īn), arcaded courtyard mosques with two axial *īvāns* (Gunābād) or with a *qibla īvān* only (Firdaus)

and completely enclosed hypostyle mosques with no courtyard and a roof carried either on columns (Sujās) or on vaults (Masjid-i Kūcheh Mīr, Naṭanz). Local preferences assert themselves (e.g. the prevalence of the two-*īvān* mosque in Khurāsān or of the four-*īvān* mosque in the Iṣfahān area) and the principle that mosques perform different functions from one centre to the next, dependent – if on nothing else – on the size of the comunity, seems to be accepted.

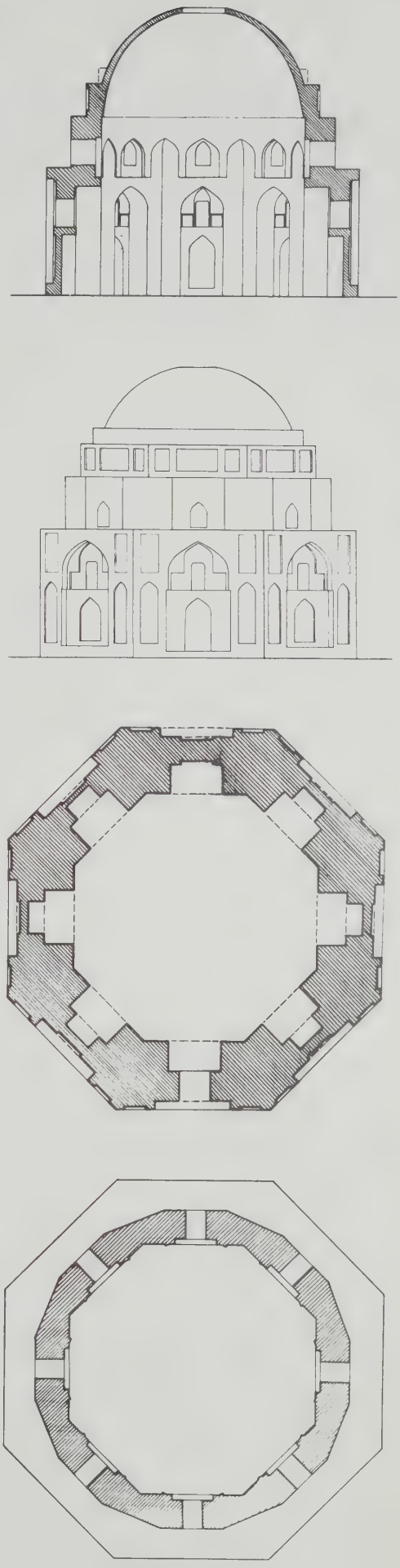
But the main change lay in a new fusion of four basic features hitherto used singly or in partial combination but never all together: covered areas with regular supports; domes; *īvāns*; and courtyards. The result was the classical four-*īvān* plan whose versatility made it henceforth indispensable in Persian architecture. It is essentially an inward-looking layout and this independence of the external setting meant that it could be used in crowded cities as well as in the open country. Its nucleus is an open courtyard bordered by arcades whose repetitive rhythm is broken by four *īvāns* in cruciform disposition. In mosques the *qibla īvān* would act as the portal to a domed chamber. The four-*īvān* arrangement is already found in Parthian times but the marked symmetry of the Saljūq examples, and the domed chamber itself, are absent. The same refinement of existing forms made baked brick oust undressed stone, *pisé* and mud-brick as the preferred medium of construction, again with revolutionary effect.

Not surprisingly, the monument that initiated the change was the Friday mosque in Iṣfahān (pl. 9),[20] a Saljūq capital, while the change itself was triggered by political factors.[21] Sheila Blair has shown that by 473/1080 the vizier Niẓām al-Mulk Abu ʿAlī Ḥasan b'Ali Ṭusi had completed a dome chamber in the mosque sanctuary, probably with an *īvān* mediating between it and the courtyard. His rival Tāj al-Mulk Abu'l Ghanā'im ordered a pendant dome – the Gunbad-i Khākī – erected, presumably in emulation, on the north side (481/1088). It seems that this too was preceded by an *īvān*. A ceremonial axis, significantly unrelated to the entrance, was thus established. The Gunbad-i Khākī is itself an epoch-making structure.[22] It is not only modelled most carefully on the sanctuary chamber but also improves on it, so to speak methodically, at one point after another. It copies only to excel. Where the south dome chamber is expansive, the other is compact. Internally, its lines are honed down. The typically four-centred Saljūq arch is enough to articulate the elevation. Grouped in various multiples, these arches lend the interior a formidable concentration and generate a tension which resolves itself only in the explosive sunburst design of the dome's inner surface. In this forceful yet exquisitely balanced interior, what Schroeder termed the muscularity of Saljūq architecture finds classic expression.[23] For three centuries Persian architects were content to do no more than tinker with the resultant formula for the interior of a dome chamber.

Nor was this all. The Gunbad-i Khākī drew attention to the hitherto neglected north facade of the mosque, thus introducing a new flexibility and ultimately symmetry into mosque design. Given the familiarity of the four-*īvān* plan in contemporary secular architecture (e.g. palaces and caravansarais) it was natural that the two *īvāns* in the Iṣfahān Jāmiʿ should lead quickly to four. All four were surely in place soon after a disastrous fire in 515/1121 – if not long before. Had Tāj al-Mulk challenged the old vizier by endowing another mosque altogether, all this might not have happened. Probably it was his desire to eclipse his rival as ostentatiously as possible that led him to build a similar and probably otiose dome chamber in the very same mosque.[24] The consequences determined the future of the Persian mosque. Political animus became the midwife of architectural innovation.

Several 6th/12th-century mosques built in the orbit of Iṣfahān show various applications of this plan. At Zavāreh in 530/1135–6 four unequal but huge *īvāns* dominate the diminutive square courtyard, destroying the sense of a continuous interior facade and obscuring the correct orientation. At Ardistān (553–5/1158–60) a happy mean is struck between the pokey courtyard of Zavāreh and the great plaza of the Iṣfahān Jāmiʿ, and the varying breadth of the *īvāns* is an adequate guide to the main axis.[25] At Gulpāygān, however, the architect apparently copied only the sanctuary of the Iṣfahān Jāmiʿ.

In these various dome chambers, whether in mosques or in mausolea like the Jabal-i Sang, Kirmān (pl. 10), new methods of articulating an interior, and of relating interior and exterior, are explored. Ornament, whether applied or intrinsically structural, is reserved for the interior, although Saljūq minarets and mausolea illustrate an entirely contrary concern. In domed mosques, the emphasis shifted to the squinch zone, which in Sasanian buildings had been insignificantly small and had only gradually expanded. At first structural rather than decorative means were chosen to fill this space convincingly, as the Tīm mausoleum and the Davāzdah Imām at Yazd (429/1037) show. The trilobed squinch fully developed at Yazd marks the moment when spatial concerns infiltrate the zone of transition.[26] For its full development this type of squinch demands a lofty zone of transition and the resultant tripartite division of the interior was soon mirrored externally: as an octagon, as triangular



10. Jabal-i Sang, Kirmān.



shoulders at the diagonals and even as arch profiles flush with the wall. In Saljūq mosques generally the novel approach to the transition zone was that the entire area was treated as a single compositional unit and a focus for lavish decoration (pl. 11). The trilobed arch already discussed was simply a refinement of this trend. In the Iṣfahān area it assumed the proportions of a leitmotif. It is repeated on numerous scales, but always within a grand enclosing arch so that the overall impression is a typically Islamic one: unity in multiplicity. Such an elevation possesses an almost fugal complexity; the overall structure has an absolute clarity, but within that framework it permits a build-up of supplementary detail which has its own cumulative force. The very form of the trilobed arch epitomises the bearing function of the entire zone; it is an image of energy. This is all the more obvious given the com-

11. Friday Mosque, Ardistān, interior.

12. Friday Mosque, Farūmad, *miḥrāb*.





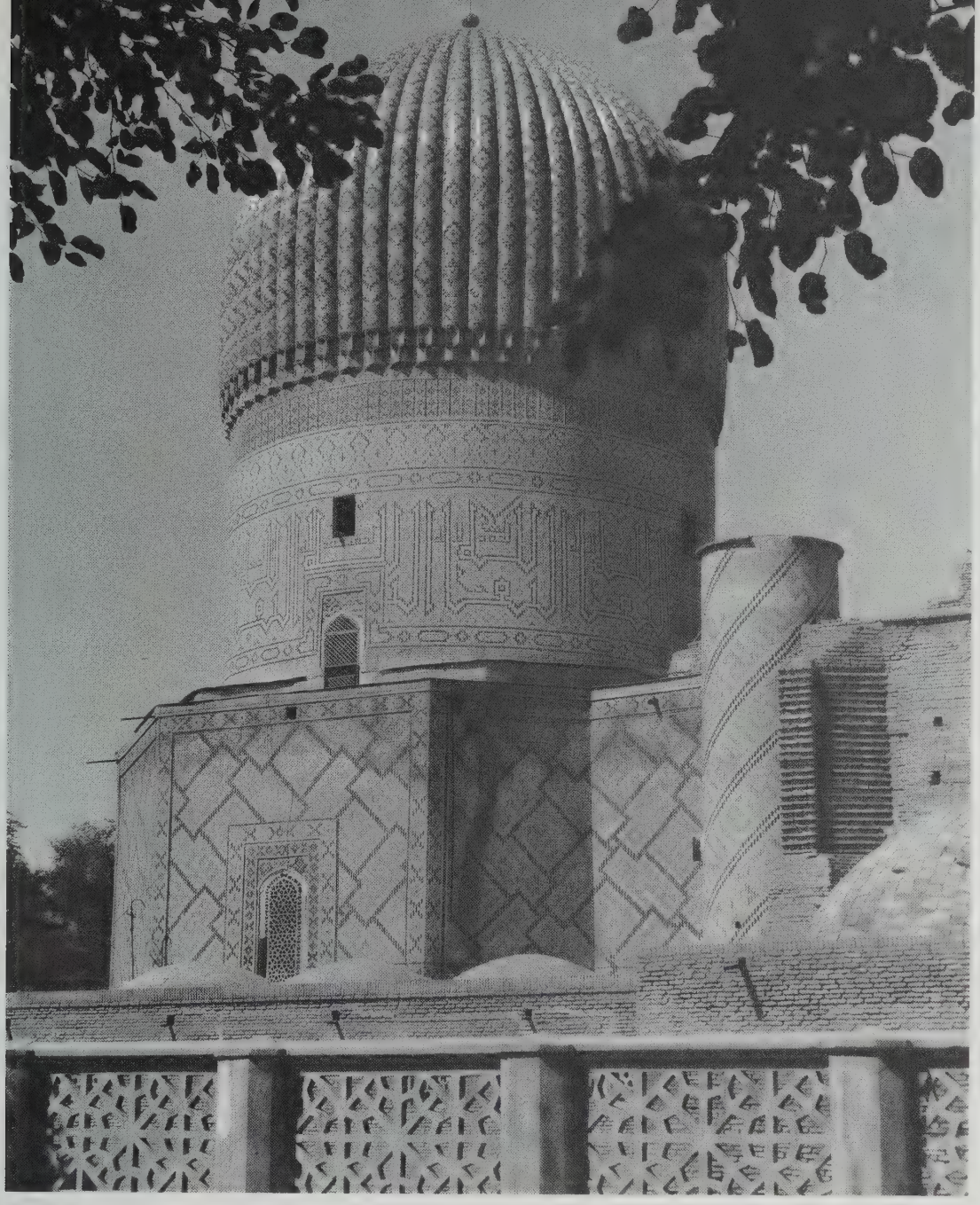
13. Friday Mosque, Iṣfahān.

parative serenity of the areas above and below it. In the careful orchestration of these great transition zones, with their powerful three-dimensional quality, structure becomes something to be gloried in, not hidden. Its workings stand revealed. It is as if the bonnet were removed from a car to exhibit the functioning of the engine. Nevertheless, given the desire of later architects to outdo their predecessors, and given also the unalterably limited area of the transition zone, it was inevitable that in time decorative concerns should oust structural ones.

Vaulting indeed characterises Saljūq architecture as a whole (pl. 13). Within such general headings as cradle, cloister, groin, stalactite, lantern, rib, transverse, pendentive, and domical vaults numerous variations lie concealed.[27] Some occur only once or twice and seem to be a deliberate exercise in virtuosity. Many vaults are only one or two bricks thick in their upper sections and were clearly intended to carry only little weight. Their decorative role was paramount. Standards are not uniformly high; thus among the 500-odd vaults of the Iṣfahān Jāmiʿ many have had to undergo multiple restorations. Frequently domes are not only much larger than Sasanian domes but also display much more refined proportions and much thinner shells. The double dome now makes its appearance (Sanjar's tomb, Marv) and bearing walls are pierced with multiple openings. This confidence stems from the precise calculation – or, as Schroeder suggests, the intelligent observation of failure – which distinguishes these brick buildings from their Sasanian precursors executed in rubble.

Brickwork now extended its range beyond structure to become the prime vehicle for decoration. Once again, the seeds of this development, as of the domed mosque, the four-*īvān* plan, tomb towers, cylindrical minarets and the trilobed squinch, can be traced in the Iranian renaissance of the two centuries preceding the Saljūqs. But in this case too the Saljūq period was a time of consolidation, when the potential of these novel elements was explored.[28] The use of brick allowed architects to devise decorative schemes that harmonised with the structure itself. Wisely, they rejected the representational element found in the Jurjīr mosque. Instead, they used brick for rectilinear patterns closely linked to actual brick lays; these sufficed to produce an apparently endless succession of abstract patterns. Patterns were enlivened by slight projections and recessions which the play of light and shade magnified and altered from hour to hour. Stamped or incised joints added an extra richness to the texture. For more complex schemes and for inscriptions (pl. 14), special shapes, including curved elements, were cut and moulded in advance (pl. 12). With this remarkably variable medium at hand, it is not surprising that for centuries the monochrome quality of brick decoration was not felt to be a disadvantage (pl. 15). Nevertheless, glazed brick and terra cotta in light and dark blue were used tentatively from the 5th/11th century to enhance brickwork designs, highlight architectural features or render inscriptions more legible (pl. 16).[29] Gradually polygonal glazed elements were introduced, white and black supplemented the colour range and the scope of the technique widened to include the whole building. Simple tile mosaic is already found in late Saljūq architecture though its full development is an Ilkhanid achievement.

14. Minaret at Vābkent.



15. Gūr-i Amīr, Samarqand.

THE ILKHANID PERIOD

The traumatic impact of successive Mongol invasions from 1220 caused an 80-year hiatus in serious building activity, yet the legacy of Saljūq architecture was preserved intact into the Ilkhanid period. Some 150 Ilkhanid buildings have so far been recorded, no doubt a mere fraction of the original output of the period.[30] As always in Persia religious buildings dominate in the surviving architecture, accounting as they do for perhaps 90 per cent of it. Virtually no domestic or vernacular buildings remain, and the sole palace, Takht-i Sulaymān, is badly ruined. Moreover, of the exceptionally splendid but necessarily ephemeral tented architecture which flourished in this period only ambiguous reflections survive in contemporary book painting.[31] The high percentage of religious buildings is hard to parallel in other Islamic periods. But it scarcely seems to reflect any marked increase in religiosity. Almost half of these structures are tombs. A round dozen are *madrasehs*, *khānqāhs* or shrines. The remainder are mosques or the remains of mosques – minarets, *īvāns*, *miḥrābs* or perhaps only a few tiles or inscriptions.

Building activity, far from proceeding at a steady pace throughout the period, was characterised by sudden spurts: thus about half of the buildings erected bewteen 617/1220 and 803/1400 date to the period 700–36/1300–35, which encompassed the reigns of the most active royal patrons who were also the first generation of Muslim Īlkhāns. Elsewhere patronage was concentrated in a given place rather than in a short given period (e.g. Shīrāz and Yazd).



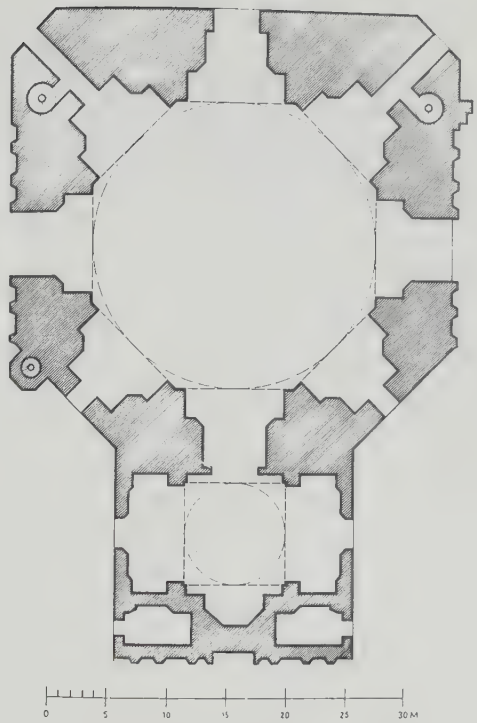
16. Friday Mosque, Nigar, minaret.

Perhaps the most striking characteristic of Ilkhanid architecture is the readiness to copy Saljūq forms, whether these are flanged tomb towers (Varāmīn, Basṭām), twin-minaret facades (Iṣfahān), domed square mausolea (Marāgheh), isolated domed mosques (Kaj, Azīrān and Dashtī) or numerous stucco *mihrābs*. As in so many cases of stylistic dependence on earlier work, fidelity to the broad outlines of Saljūq style coexists with a tendency to refine or complicate the details of that style. In matters of construction and decoration the same dependence manifests itself, whether in carved joint plugs or in stalactite cupolas. The slow pace of change explains the dating controversies surrounding certain major monuments: buildings at Farūmad, Zūzan, Ṭūs and Hamadān have been placed variously in the Saljūq and Ilkhanid periods. Only with the gradual introduction of tile mosaic, and a new emphasis on lustre tiles used for dados, did Ilkhanid architecture emancipate itself from Saljūq tutelage. Changes in decoration eventually created a new approach to structural problems. But the full impact of the new medium was not felt until the 9th/15th century. As late as the 700s/1370s, the Friday mosque at Yazd is still basically brick-oriented despite its lavish display of tilework.

Truly progressive Ilkhanid architecture can best be studied at Tabrīz and Sulṭāniyyeh, two of the most gigantic projects of town planning known in the Islamic world, where the architects were working to the full extent of their capacities, and indeed at times trespassed beyond them. Probably the Masjid-i ʿAlī Shāh, Tabrīz, now a gaunt hulk, was such a case.[33] The inclusion of a carefully planned garden in the ensemble gave it the human dimension it otherwise lacked. Its popular name of *arg* (citadel) is eloquent testimony to the impact of its cliff-like walls, whose plain brick gives an unrivalled sensation of mass and content. The stated aim of the patron, an Ilkhanid vizier, was to eclipse the Tāq-i Kisra at Ctesiphon, that symbol of the remote majesty associated with the country's pre-Islamic past. Hence the core of the mosque and its cynosure is precisely its great *īvān*. Lesser courtyards with small cells opening off them adjoined its sides. Two lofty minarets probably flanked the *īvān* itself. Contemporary accounts stress the mosque's extremely lavish decoration of marble, gilding and tilework.

Sheer size also marks the two great royal mausolea of the period. In Tabrīz the now vanished tomb of Ghazan,[34] admiringly described by contemporary historians, was remarkable not only for its loftiness (some 45 metres high) but for its unusual plan and decoration: a twelve-sided domed tower, its walls decorated with sculptures of the zodiacal signs and with apparently the most developed scheme of glazed tilework yet used in the country. Quite possibly this building was intended as the crowning achievement in the already long-popular genre of tomb tower.

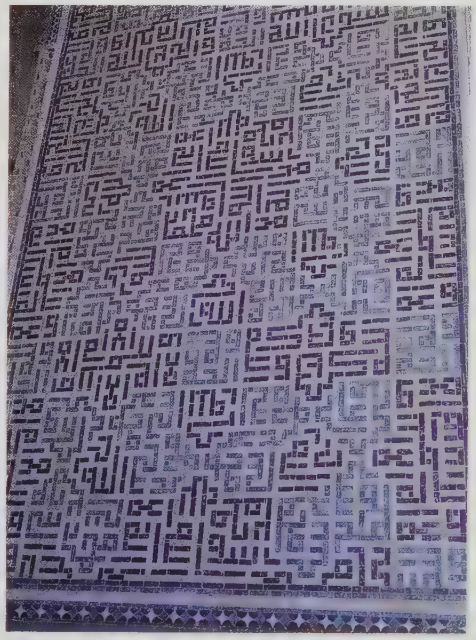
Similarly, the near-contemporary tomb of Öljeitü at Sulṭāniyyeh (pl. 17) may well have been conceived from the outset deliberately to eclipse its predecessors among centralised mausolea normally of domed square type (pl. 19).[35] It too was of marked originality: a



17. Mausoleum of Öljeitü, Sulṭāniyyeh.


19. Mausoleum of Öljeitü, Sulṭāniyyeh, aerial view.

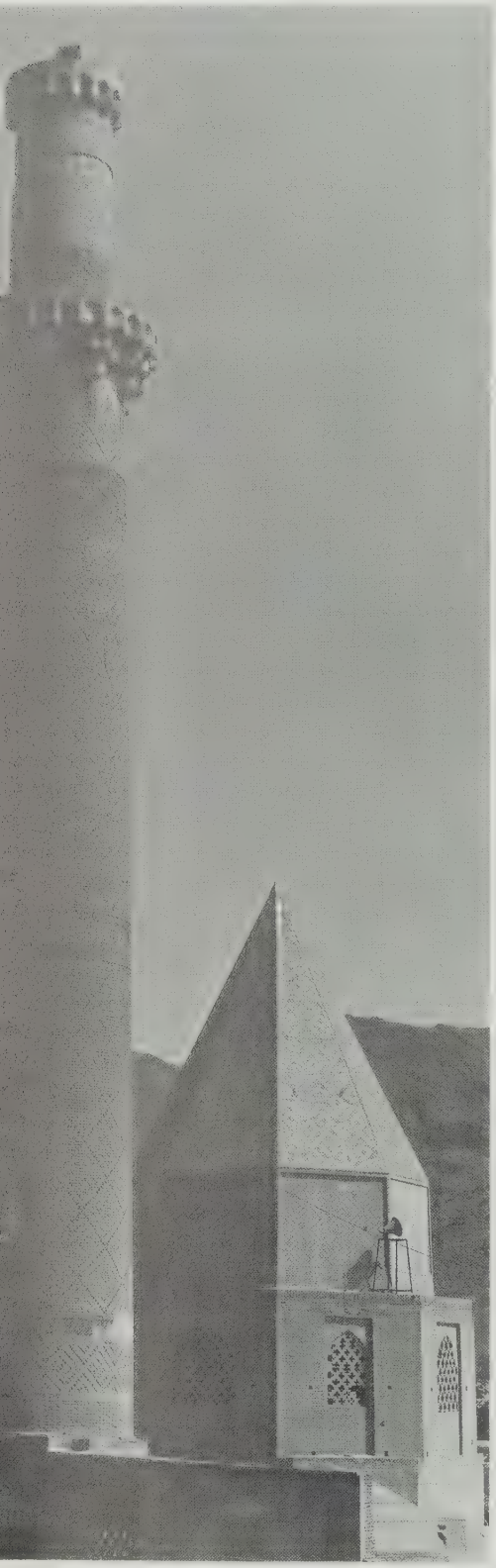
18. Friday Mosque, Yazd, epigraphic panel.



20. Mausoleum of Öljeitü, Sulṭāniyyeh.



21. Shrine and *khānqāh* at Naṭanz.



gigantic octagon – instead of the usual square – in which the bearing walls, pierced by deep niches and reveals and a matchless vaulted gallery, were pared to the minimum requirements of stability. The pointed, egg-shaped dome provides a smooth culmination to the complex architecture beneath. It avoids the already well-established double-shell solution in favour of a single shell whose stages of diminishing thickness are cloaked by a veneer of glazed bricks resting on a network of regularly spaced supports, a kind of cellular system. Perhaps the most audacious innovation of the building, and one pregnant with possibilities for the future, is the corona of eight minarets which formerly surrounded the dome. Whether or not the metaphor of the crown was intended literally, the idea was enthusiastically plagiarised in later buildings as varied as Ottoman mosques and the Taj Mahal. The galleries are happily intact and provide a virtuoso display of the decorative techniques developed for this unique mausoleum. Their twenty-four vaults bear carved and fretted stucco designs akin to the repertoire of book illumination; their colours retain a near-pristine brightness (pl. 20).

Significantly, the finest of the lesser Ilkhanid structures date from the same generation as the great imperial foundations and were therefore built under their direct influence. Buildings like the shrines of Naṭanz (pl. 21) and Pīr-i Bakrān (pl. 22) or the Ashtarjān Jāmiʿ reflect in particular that intoxication with the dazzling new dimensions of colour through glaze rather than paint which characterised contemporary court architecture (pl. 18). But rather than duplicate the absolute size of such royal buildings, they employ illusionistic devices towards the same end. Hence their soaring narrow portals, clustered slender columns, attenuated proportions and busy articulation of surface by slim pointed arches or niches (cf. too the Varāmīn and Yazd Jāmiʿs). In such 'provincial' buildings the energy, the sheer sap, of the period finds expression in a prodigal variety of decoration. Very little of the repertoire of one building is repeated in the next. Stucco is used with much more panache than hitherto: for ethereally white *muqarnas* vaults, for the corbelled multi-layered mantels of *miḥrābs*, for square Kufic inscription panels on the scale of hoardings, as a veneer of simulated brick bonding and in a host of other original contexts. Finally, decoration acquires new functions. The trend is away from the typically Saljūq division of applied decoration into bands coinciding with the structural components of the building. Instead, the focus has narrowed to the individual panel. An interior like that of Pīr-i Bakrān invites comparison with a picture gallery in which the eye travels from one isolated masterpiece to the next. The very arrangement of these individual panels is somewhat haphazard.

Even buildings such as this are, however, not typically Ilkhanid in their layout or in their idiosyncratic ornament. Far more characteristic of the period was a tendency to work according to well-tried formulae. Outstanding examples of this are the twenty-odd tomb towers of Qum, the mosques built in the environs of Iṣfahān *c.*725/1325 as part of an abortive housing project, or the modular mud-brick dome chambers of Yazd and Abarqūh. In these less adventurous buildings the heritage of the Saljūq period was preserved and slowly adapted into a slightly different idiom. It was this steady continuity – especially under Muzaffarid patronage – which eased the transition to Timurid modes.[36]

Hence, for all the superficial similarities between the establishment of the Mongol and Timurid empires, it is hard to identify the genesis of the Timurid architectural style.[37] The pace of building activity did not slacken markedly as a result of Tīmūr's compaigns, which were less destructive than the Mongol ones, sparing for example the Muzaffarid territories in central and southern Persia. As usual, the areas favoured by the court flourished. The imperial Timurid style developed especially in Khurāsān, fusing the very different traditions of southern Persia and Transoxiana. Nevertheless, the imperial capitals of Samarqand and later Herat arguably contain more Timurid architecture of the first rank than does the whole of Persia proper, and to ignore this material would result in a very one-sided view of Timurid architecture.

The buildings of Samarqand are unique in a double sense. First, they demonstrate the formation of a distinctive style which at first found little echo within the rest of Persia; and second, this style developed after 772/1370, a period which saw no markedly novel or ambitious projects in Persia itself. For once the apogees of political power and building activity had coincided. It seems clear that in many features of planning, structure and decoration the north preceded (and often excelled) the south; for example, the interplay of light monochrome and glazed bricks as a decorative revetment, or the use of raised medallions in tile mosaic compositions, certain characteristic vaults (e.g. the Ishrāt Khāneh tomb, Samarqand) and especially the deliberate choice of gigantic size as an integral part of the planning of major public structures. Persian architecture proper has nothing to rival the Shāh-i Zindeh necropolis, where an imposing processional approach complete with a monumental staircase – a rarity in Islamic architecture – gives place to the entirely domestic flavour of a meandering street bordered by irregular 'houses' (actually mausolea) so arranged as to allow views of the countryside and the town-scape to impinge (pl. 23).[38]

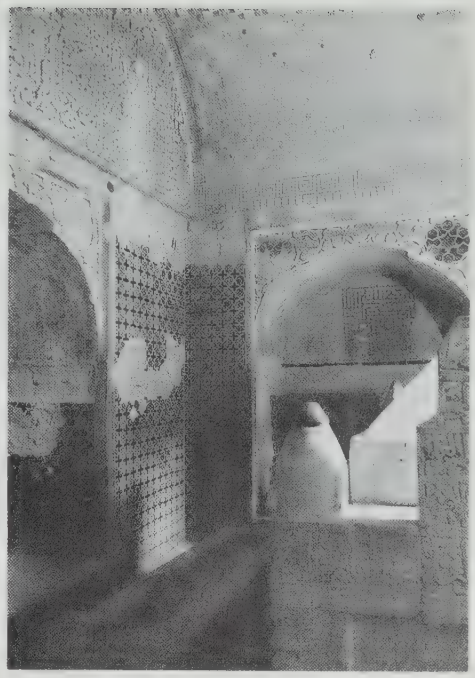
The Timurid buildings of Afghanistan date from the 820s/1420s onwards, a period better represented in Persia than the previous few decades, and their style is demonstrably akin to that of the major monuments of Persian Khurāsān erected by Shāh Rukh's family and circle.[39] But they also serve as a bridge between Transoxiana and Persia proper by using such features as ribbed domes, multiple minarets and glazed terracotta.

Only a few 9th/15th century buildings in Persia itself were royal foundations, notably the mosque of Gauhar Shād, Mashhad, and the Blue Mosque in Tabrīz. It is surely no accident that these are the undisputed masterpieces of the period on Persian soil, or that their nearest rivals were erected in Khurāsān in the orbit of the imperial court: those at Khargird, Tayābād and Turbat-i Jām. Less ambitious patronage in the Yazd area stimulated the growth of a local school there (cf. mosques and shrines in Yazd, Abarqūh, Bidākhavīd, Bafq, Taft and Bandarābād). Under the Aq-qoyunlu rulers some superb tilework was produced at Iṣfahān. Isolated small towns or villages occasionally produced significant monuments (Khunj pl. 24, and Māhān) while throughout the province of Māzandarān are scattered numerous tomb towers whose style is remote from the mainstream of Timurid architecture.

Thus there was no single school of Persian architecture in the 9th/15th century. Rather did the political fragmentation of the country encourage the growth of independent schools of architecture, whose output was vast but rarely progressive and original. Attention will therefore be focused on the major school in Khurāsān, for here the untrammelled potential of the Timurid style in Persia can best be traced.

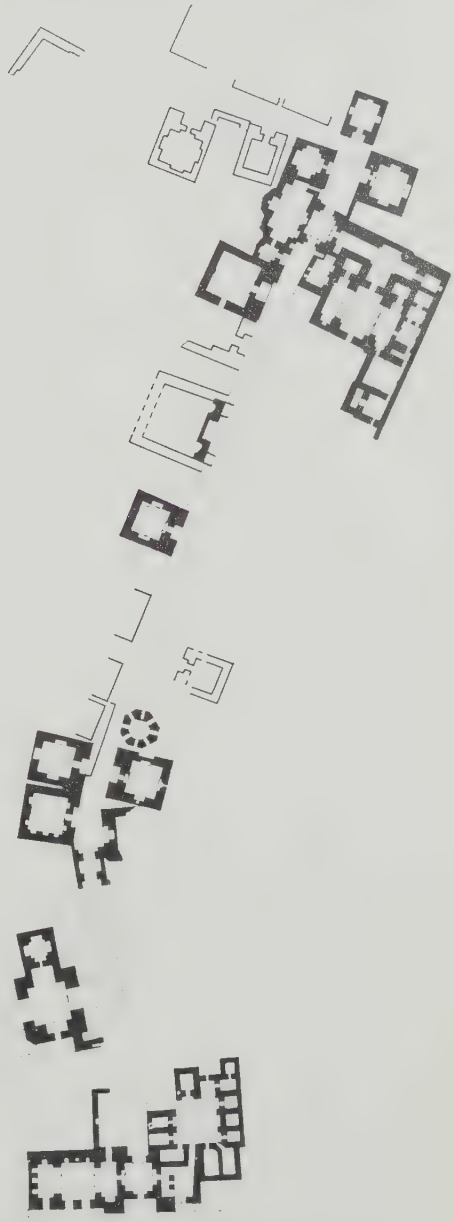
As already noted, sheer size characterises much of the best Timurid architecture, especially in Samarqand and Herat. The Shahr-i Sabz palace *īvān*, for example, was probably some 40 metres high, as is that of the Bībī Khānum mosque. In Persia proper the Khargird *madraseh* (completed 848/1444) is larger than any previous example, while no previous *pīshtāq* is proportionately higher than those of Tayābād and Turbat-i Jām. Indeed, the *pīshtāq* now acquires a new significance. It may obscure the domed chamber behind it or display a marked salience. Sometimes it fulfils a symbolic rather than a functional role, e.g. to close a facade or to act as a screen rather than to lead anywhere. Minarets flanking a lofty portal continue (mosque of Gauhar Shad) but now squat corner turrets – derived from the summits of minarets or perhaps even Indian *chattris* – variegate the roof line (pls. 26 and 27).

The three-dimensional quality of some Timurid *pīshtāqs* (e.g. Balkh) betrays a new interest in the articulation of facades. At Khargird,[40] and to a lesser extent at Gazur Gāh, near Herat, a syncopated rhythm may be detected in the articulation of the front by niches and panels (pl. 28). Both structures accord marked importance to perimeter walls as well as to the main facade, thereby copying numerous Transoxanian buildings. But Khargird transcends its models because its architect allows spatial considerations to intrude, if somewhat timidly, rather than follow earlier Timurid practice and rely on glazed bricks to energise his facades.



22. Shrine of Pīr-i Bakrān, Linjān.

23. Shāh-i Zindeh necropolis, Samarqand.



24. (*facing page*) Gunbad-i Shaykh Ḥājjī Muḥammad, Khunj.

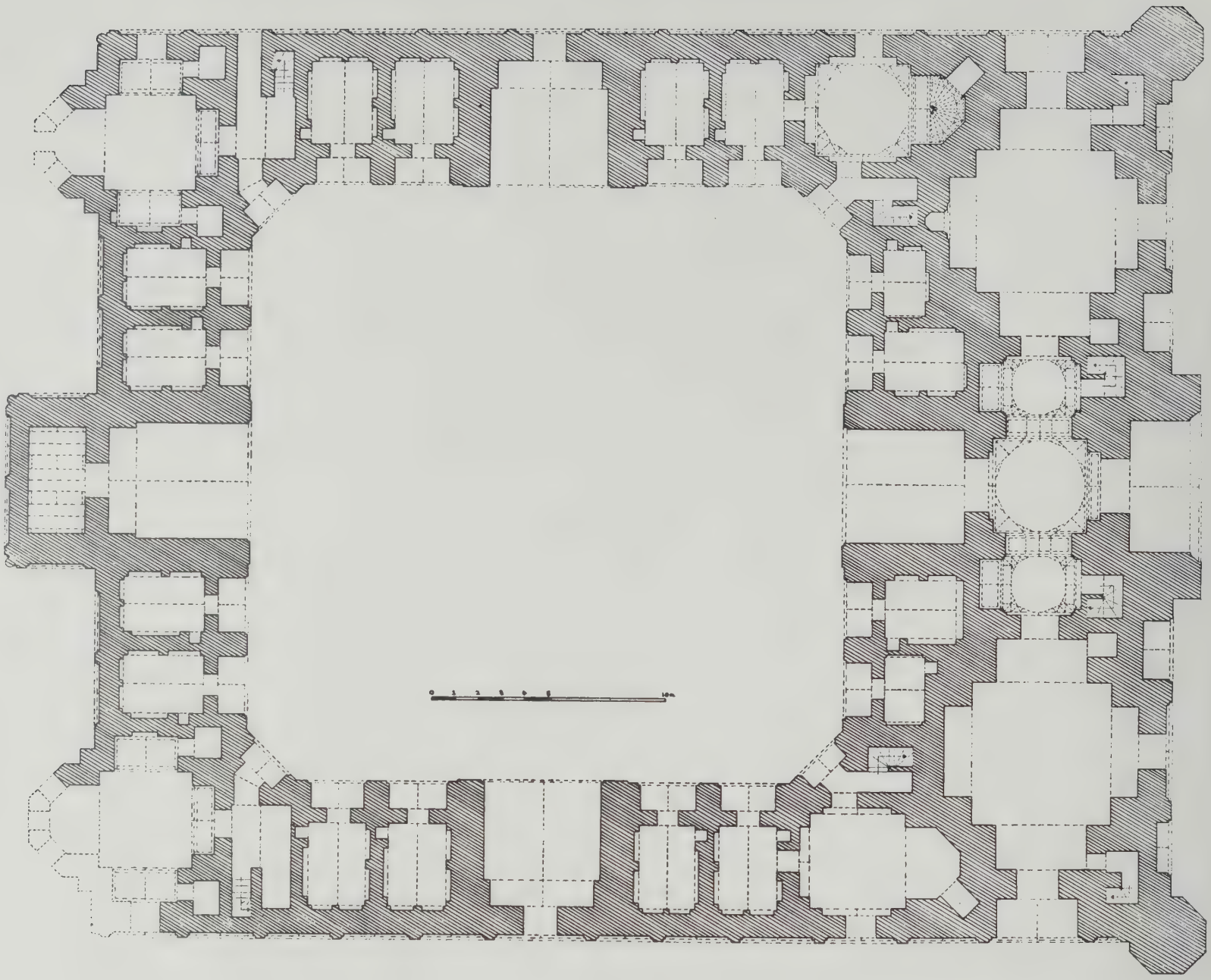
25. Masjid-i Shāh, Simnān.

27. Mosque of Gauhar Shād, Mashhad, minaret.





26. Shrine at Qum.



28. Madrasch-i Ghiyyāthiyyeh, Khargird.

While no major new building types were devised, an increased fluency and confidence in handling space may be noted. Once again, the factor of size is crucial. It allows the architect to exploit devices of anticipation and echo, of axiality and symmetry, of repetition, ambiguity and surprise. At the Khargird *madraseh* carefully scaled lighting, conflicting axes and a precise though unexpected matching of internal and external emphases make these devices yield their fullest effect. An *īvān* punctuates the serried arcades of each side of the spacious courtyard, imposing symmetry on what would otherwise be empty repetition. The corner blocks, with their bevelled entrances and ingeniously accommodated staircases, display an impressive mastery of small-scale detail which admirably complements the architect's control of the grand design. Especially notable is the way that living space has not been sacrificed in the reconciliation of the conflicting demands of living accommodation and of easy access and circulation. The transition between successive functions is managed naturally and smoothly by the architect; his is the art that conceals art. All these subtleties of design are subordinated to an overall system of proportions as simple as it is satisfying. The courtyard is square, and its sides are related to the shorter and longer perimeter walls in a ratio of 2:3:4. Khargird thus attests a harmonious balance – also found at Turbat-i Jām and Tayābād – between the polarities of compression and expansion. Some of the Samarqand buildings, by contrast, seem quite simply larger than necessary. Their plans occasionally betray an element of rote, as if the intellectual input which produced them were not enough to justify their size. A century later the bankruptcy of sheer size as a deliberate element in

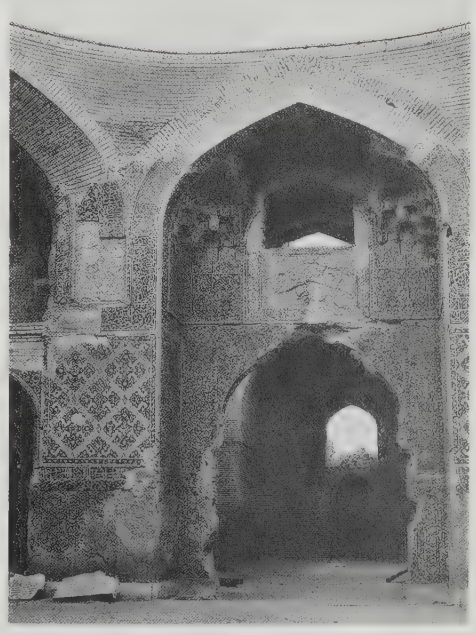
planning is painfully evident in mosques around Herat (e.g. Ghuriyān or Ziyāratgāh), where poverty of invention is no longer veiled by tilework.

While architectural layouts remained traditional, the Timurids developed vaulting[41] and tilework to a hitherto unprecedented degree (pl. 30). *Muqarnas* vaults, plain, painted or tiled, brought – as before – spatial variety into arched forms and functioned as a bridging element between rear and frontal planes, thereby mitigating the blunt contrast of solid and void. Nevertheless, the motif underwent certain changes. It was, for example, often reduced to a nearly trivial scale and flattened into a single plane. Sometimes the tiny cells were used *in toto* as sculptural masses, forming hanging or dripping stalactites strikingly reminiscent of equally 'decadent' work at the almost contemporary Alhambra. The *muqarnas* was also assimilated as a decorative carapace for a new style of vaulting frenetically active in appearance (Khargird, Tayābād, Turbat-i Jām and the mausoleum of Gauhar Shād at Herat). Concave, acutely pointed blank arches which spring from the corners and generate a mass of kite-shaped and other polygonal forms replace the familiar squinch zone of previous centuries (pl. 31). Sometimes major and minor ribs are given equal prominence, thereby confusing the structural system. Thus the transition zone loses its former crisp definition, becoming mobile, even fluid, in appearance and apt to dissolve into an ambiguous welter of angular shapes. Its constituent geometric forms, which also occupy different planes, variously subdivide the space between the major arches. The different colours and designs of these 'filler' devices keep the eye moving. The major dynamic forms seem to shoot upwards with the velocity of comets, an image strengthened by the rays which converge towards the apex of the arch, and by the scatter of *muqarnas* cells beneath, each a bright spot of light. Their impetus demands that they meet in a climactic nexus at the centre of the vault, but usually they stop short before then and instead define a polygonal dome or resolve themselves into a stellar corona bearing a dome on a diminutive arcade. Seen from below, then, such a vaulting system presents a bewildering array of conflicting emphases, generating restlessness rather than repose, excitement rather than contemplation. Its inner kinship, despite the intrusion of the third dimension, with the two-dimensional geometric networks of the minor arts (e.g. doors) leaps to the eye. Light plays in fleeting and capricious fashion over this multi-faceted surface and thereby contrives to suggest the fragility of the whole. Structure, surface patterning and lighting therefore combine to deny solid substance to these vaults. Such an impression is entirely appropriate, for the work of supporting the dome is actually performed behind this fanciful screen by simple structural forms of immemorial antiquity in Persia: squinches, barrel or groin vaults and corbelled arches. Slats and scaffolding anchored by mortar hold the infrastructure in place. By the late 9th/15th century this pyrotechnic style, the full potential of which was realised only in Khurāsān, had exhausted itself.

Domes also express the Timurid fascination with vaulting.[42] Drums are raised to an unprecedented height and the melon dome becomes popular (Samarqand [pl. 15], Herat, Balkh, Kirmān). Both features customarily imply a double dome. This in turn leads to the reduction or disappearance of the external zone of transition and of various earlier devices, such as galleries, intended to mask that zone. Similarly, the stepped and polygonal drum vanishes. Blank tiled arcades are all that remain of these earlier expedients.

Apart from vaulting, the key to Timurid architecture lies in its decoration. Materials are deliberately varied and contrasted. Brick is now used as a smooth decorative skin to frame tilework – the *bannā'ī* technique. Marble slabs form dados. Carved stucco of remarkably Ilkhanid type occurs at Varāmīn, Qum and especially Mashhad. In the already long familiar technique of glazed tilework craftsmen ceaselessly searched for new ideas and combinations.[43] Influences from bookbinding and manuscript illumination may explain the new popularity of medallion forms and certain arabesque borders. Carpet design, itself possibly derived from these sources, may have played a mediating role, perhaps introducing such features as multiple superimposed patterns in several colours. Chinese influence is marked: in square Kufic resembling seal script, *ju-yi* heads and polylobed halved or quartered medallions. Small polygonal panels in high relief originally found in carved stucco or terracotta were translated into tilework and set against tiled backgrounds, a technique first found in Transoxiana. They have a double function: to variegate the colour scheme and to impose bold geometric forms onto minute, potentially finicky designs. A sense of spatial interaction dictates this combination. Dados of hexagonal tiles in a glowing lustrous bottle-green, occasionally heightened by gilding, replaced earlier star and cross designs. Marble was interspersed with small polygons of tile mosaic. In bastions and minarets in particular an overall network of brick facing was punctuated with inset panels of tile mosaic and underglaze-painted tiles. Often these cartouches bore pious inscriptions (e.g. Blue Mosque, Tabrīz, pl. 29). Huge surfaces are uninterruptedly covered with tilework, not only walls many metres long but also round and angular columns, niches, arcades, stalactite vaulting

29. Blue Mosque, Tabrīz.

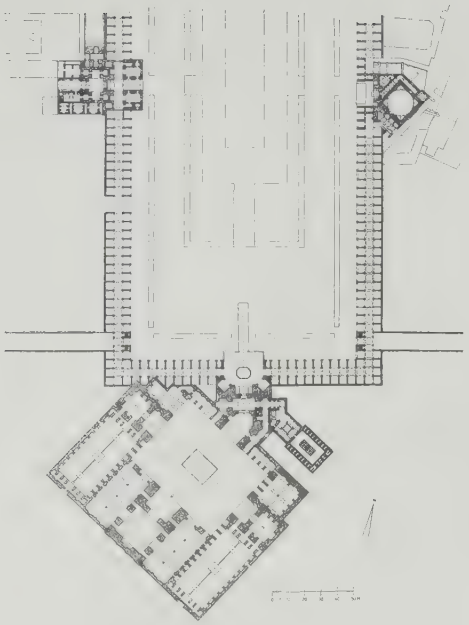




30. Friday Mosque, Iṣfahān, winter prayer hall.

31. Zarnigar Khāch, Gazūr Gāh, vaulting.





32. Part of the Maydān-i Shāh, Iṣfahān.

and the interior of domes, while their exteriors were covered with floral, epigraphic or geometric designs.

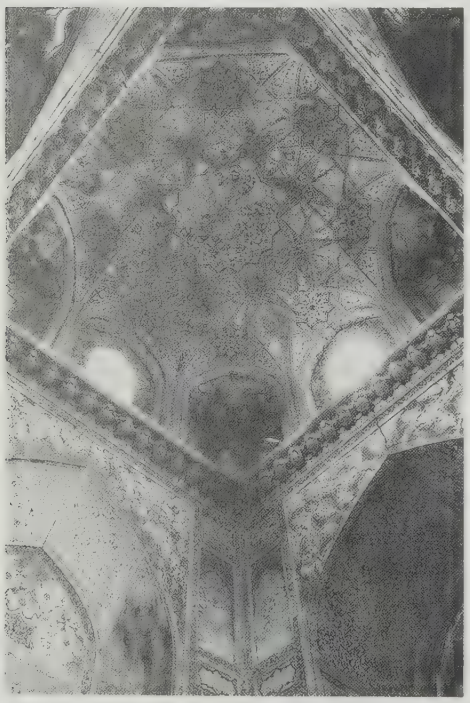
THE SAFAVID AND ZAND PERIODS

Although the long reigns of many Safavid shāhs gave promise of lavish patronage of architecture, this promise was only intermittently fulfilled.[44] Remarkably little was produced, for example, between about 1520 and 1590. But the grandiose imperial amibitions of Shāh ʿAbbās wrenched Safavid architecture out of its rut and gave it a new sense of direction epitomised by the Maydān-i Shāh and its associated structures (pl. 32). His courtiers followed his lead and transformed the face of the city with scores of buildings. Thus for a brief period Iṣfahān rivalled Istanbul and Delhi, the capitals of the other Islamic super-powers. The resultant impetus carried Safavid architecture into the 12th/18th century. Iṣfahān attracted the lion's share of resources,[45] to the detriment of provincial schools of architecture, although a network of caravansarais was built throughout the land to encourage trade.

Nevertheless, vast quantities of admittedly lesser buildings were erected throughout the country and these permit a balanced judgment of the Safavid style. Shrines and secular architecture, rather than large mosques, monopolised the energies of architects. A few provincial cities, notably Mashhad, Shīrāz and Kirmān, produced major architecture but elsewhere the most characteristic activity was repair work. Inscriptions often mis-represented such repairs and greedily arrogated the entire building to the Safavid patron. This emphasis on repairs may explain the occasional excellent pastiches of earlier styles.[46] The rate of these repairs vis-à-vis new work accelerated as the dynasty declined. Safavid influence was widely felt beyond the political boundaries of Persia – westwards in Iraq, northwards in the Caucasus and Uzbekistan (pl. 33) and as far east as Lahore.[49] Yet Safavid architecture is essentially inward-looking and shows no reciprocal awareness of Ottoman, Mughal or other foreign styles. Safavid patrons could also have profited from Ottoman and Mughal experience in handling the problems of logistics and administration which their own larger projects entailed. Evidence of rushed work suggests that the time-scale was occasionally inadequate – hence the possibly apocryphal tale of the architect of the Masjid-i Shāh, who against the royal will suspended work on the building for some years to allow the foundations to settle. In contrast, the great Sinān was at once the architect of the supreme Ottoman buildings and for decades the director of the bureaucratic organisation which made them possible.[48] Safavid architecture had no one of his genius, his status or his staying power.

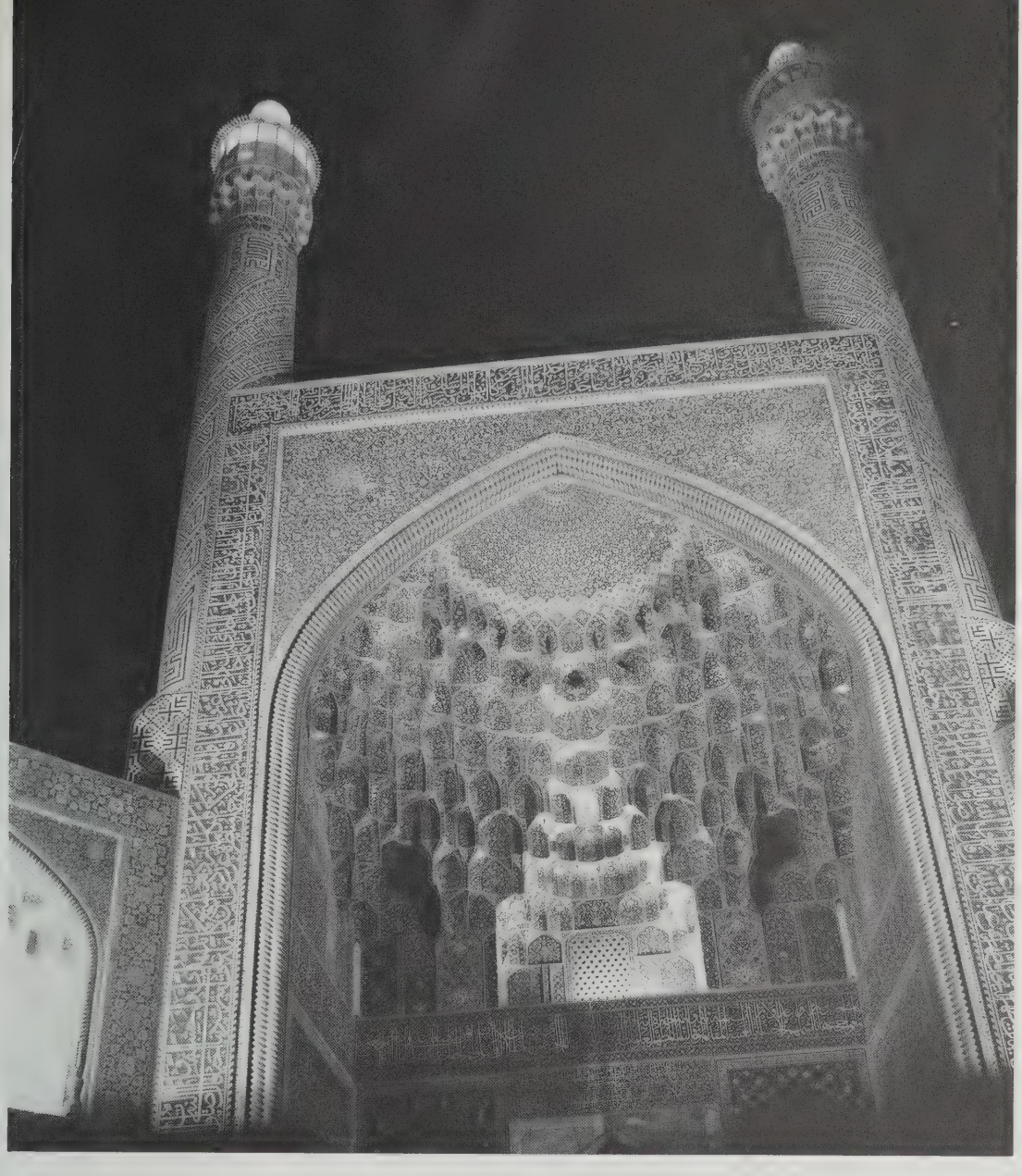
Nevertheless, the best Safavid buildings yield little to their Ottoman counterparts in sheer panache. The Timurid emphasis on sheer size continued, expressing itself as easily in the larger proportions of a given building as in the increased surface area of a shrine complex. It climaxed with the Masjid-i Shāh (pl. 34) and the Mashhad shrine, respectively the largest mosque and shrine in the country, and implied – indeed encouraged – several new approaches to architectural problems. Radial symmetry is deployed in the grand manner (Farāḥābād gardens) – or on a more human scale (Hasht Bihisht palace [pl. 35], Khwājeh Rabīʿ tomb). Frequent repetition of a single unit emphasises both the size of the construction and its essential unity. The symmetrical repetition of key elements in pairs is popular and is perhaps most effective with large-scale forms, such as the *madraseh*, lateral dome chambers and winter prayer halls of the Masjid-i Shāh. At a more intimate level, this repetition dictates the distribution of water-courses (Mashhad shrine; Madraseh-i Mādar-i Shāh, Iṣfahān) or, following long-established tradition, the placing of ornamental panels.

33. Madraseh of ʿAbd al ʿAzīz Khān, Bukhārā.

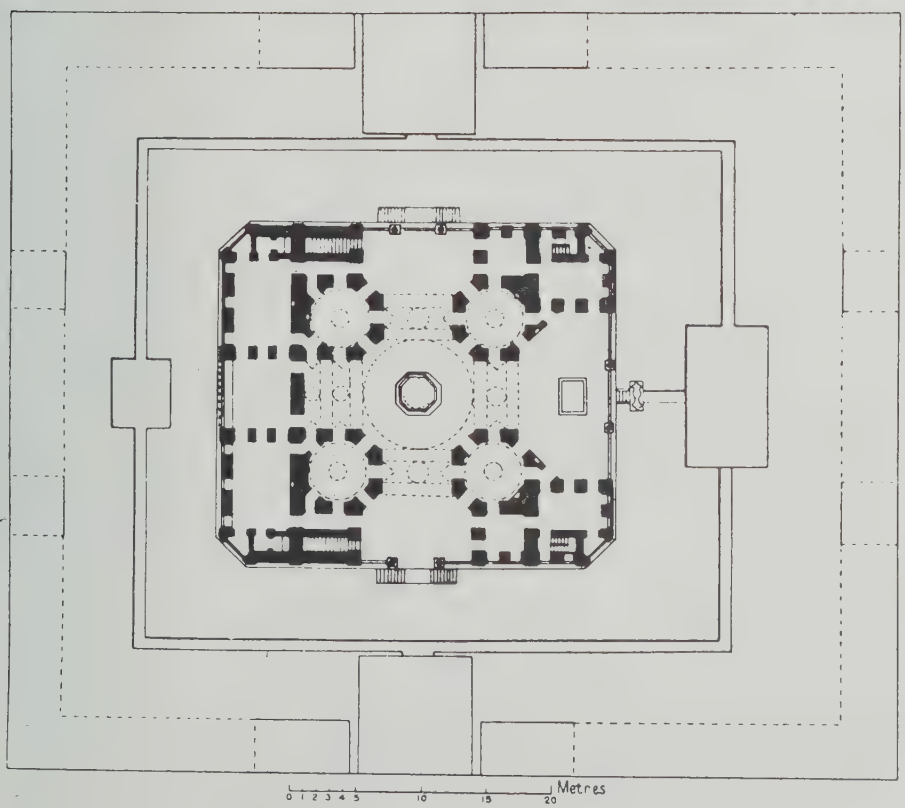


The emphasis on size also encouraged architects to compose their buildings in terms of blocks. Thus they could establish a primary rhythm of solids and voids independent of the surface glitter of the ornament later applied to the building. Voids were as likely to be pools or garden spaces as empty courtyards (e.g. Māhān). This technique too could be applied on a smaller scale, as in mausolea whose bearing walls are pared to a minimum while space is engulfed in deep niches (Khwājeh Rabīʿ; Qadamgāh, near Nīshāpūr). The *tālār* of a palace like Chihil Sutūn illustrates similar modes, while the ʿĀlī Qāpū contrives by a quirk of fantasy to transport this designed emptiness halfway up the facade (pl. 36). The deeply recessed portals of the two mosques on the Iṣfahān *maydān* are further expressions of the same idea.

Finally, the increased scale of many of these projects fostered a new inventiveness in exploring spatial values. While this spirit can be detected in relatively small interiors such as the tomb of Khwājeh Rabīʿ, just north of Mashhad, with its agitated and rapid changes of plane in the lower elevation, it is most obvious in the largest buildings of the period. When existing buildings were enlarged, whether by courtyards (e.g. Ardabīl shrine), vaulted galleries (e.g. Māhān, pl. 37) or other features, the additions generally opened up the



34. Masjid-i Shāh, Iṣfahān, at night.



35. Hasht Bihist palace, Iṣfahān.

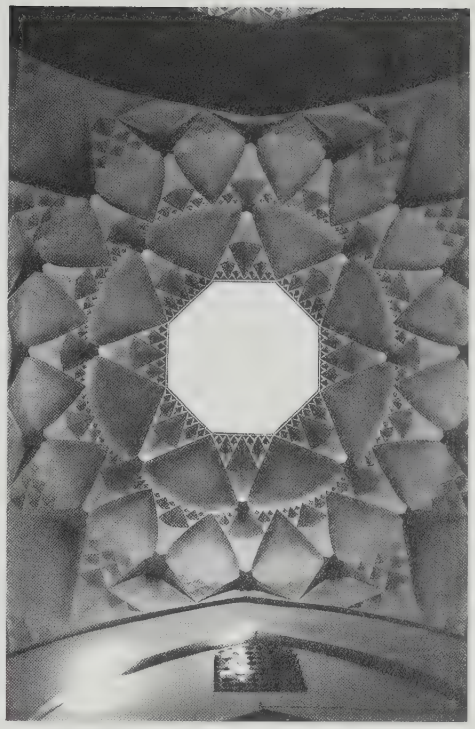


36. ʿĀlī Qāpū palace, Iṣfahan.

structure, gave it a stronger sense of axis or rendered its several parts interdependent. New vistas were created. Continuity was thereby assured, the eye being led naturally from one part of the building to the next. Sudden contrasts of scale or of lighting created novel interactions of large and small, open and closed spaces. In the Mādar-i Shāh *madraseh* a dark, low, arched doorway frames and miniaturises the peaceful idyll within: a tree-lined pool terminated by an *īvān* sheathed in blue tiles. In the Masjid-i Shāh, lighting and spatial devices create dramatic surprises. The Luṭfallāh mosque tones down harsh contrasts of lighting, preferring a contrast of scale. The low skewed passage within the entrance leads not to an open court but to one of the largest domed chambers in Persia. Here the familiar equation of the dome with the vault of heaven expresses itself with a new intensity. The sunburst design at the apex of the dome generates a network of curved lozenges which radiate outwards and expand gradually to fill the entire surface of the dome. Their deep blue fields carry pinpoints of light formed by luminous arabesques. It is a paradigm of the night sky.[49] The Masjid-i Shāh and the Mādar-i Shāh *madraseh* make the analogy between the dome and the heavens explicit by so arranging the interplay of light and surface that rays of light stream from the apex of the dome.

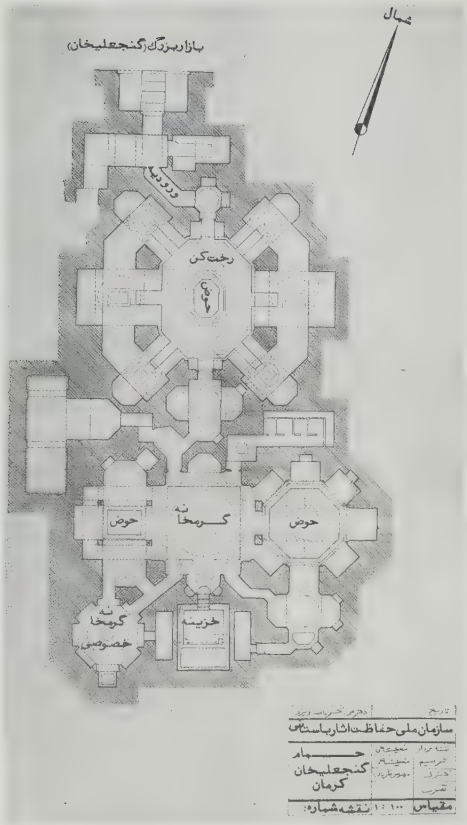
Colour is of course central to Safavid architecture. Not even the Timurids had used tilework so lavishly: thus the floral dados of the Luṭfallāh mosque and the gigantic exterior arabesques of Safavid domes find no earlier parallel. At its best, this tilework almost rivalled earlier achievements. But in general its technique was inferior in that large square underglaze-painted tiles of dulled colours replaced the laborious tile mosaic of earlier times, in which each colour had been fired at optimum temperature. This permitted huge areas to be covered with tilework quickly and cheaply. Buildings came to be clad in tiles from top to bottom, to the detriment of structural values.[50] As a result Safavid buildings are sometimes dismissed as facade architecture. Certainly many of the major monuments are intended to be seen principally from one side, for the other sides are largely or entirely undecorated. This could only lessen the three-dimensional quality of the building.

It is therefore not surprising that Safavid architecture should lack the dynamic tension of earlier periods. The focus of attention had shifted from structure to ornament. Instead of outright innovation, the Safavid architect preferred to refine the relationship between the constituent parts of his building. The forms that he was using had a long history and were few in number. In reshuffling them he could bring to bear the accumulated experience of centuries. Among the better architects this knowledge bred confidence and a sure taste, indeed a sensitivity to nuance, that excluded accidental mistakes and excess in matters of



37. Shrine of Shaykh Niʿmatallāh Valī, Māhān.

38. Masjid-i Āqā Buzurg, Kāshān.



39. Bath of Ganj ʿAlī Khān, Kirmān.

construction. Under the Safavids, then, architects chose the middle way and garnered all the advantages of that decision. Traditional forms, now effortlessly deployed on a gigantic scale, achieve their fullest maturity. Small wonder, then, that architects should be so precisely attuned to the varied functional potential of the modular elements which made up their buildings. Forms, in short, became interchangeable. The mausoleum of Khwājeh Rabīʿ could as well be a pleasure pavilion like the Hasht Bihisht. Mosques, caravansarais and *madraseh* are hard to tell apart (Mādar-i Shāh complex, Iṣfahān). Religious shrines and palaces have near-identical chambers for housing precious ceramics (Ardabīl and ʿĀlī Qāpū).

In secular architecture the emphases are naturally somewhat different, but some of the underlying concerns already discussed, especially the interest in scale and spatial diversity, may also be detected here. Two categories dominate: palaces and utility structures.[51] In the first category, several typological subdivisions suggest themselves. The conception of a palace as a full-scale garden garnished with buildings is found at Farāḥābād and in the gardens adjoining the Maydān-i Shāh.[52] Here the designer has articulated space by only a few elements: serried domes, awnings, courtyards, corridors, trees and water. Ample spatial diversity is packed into a limited area; thus at Iṣfahān, a palace is transposed on to the Khājū bridge. Most of these palaces affect a deliberate insubstantiality. They minimise obviously solid bearing walls, preferring to pierce the surface by large windows, niches or loggias and to encrust interior walls with yet more niches as well as false low-hung ceilings and stalacite vaults. In virtually all of them the natural surroundings are brought into play, and indeed are often suggested in the figural tilework of these buildings, in which scenes of hunting and banqueting predominate.[53] Royal Safavid miniatures conjure up in exquisite detail the courtly life-style to which such palaces ministered, and as a bonus they document numerous lost types of fastidiously elegant pavilions whose rickety structure sufficiently explains their disappearance. Wood here plays an important structural role which it is accorded nowhere else in major Persian architecture. Ground plans and elevations hark back with surprising fidelity to pre-Islamic models.

Among the varied utility structures of the period (bridges, bazaars, baths [pl. 39] cisterns, dams, pigeon towers and others) caravansarais dominate (pl. 38). They belong to a world entirely divorced from the court.[54] Virtually no extraneous decoration impinges on their functional starkness. It would have been a waste. The skill they demanded was rather the constructional one so deeply embedded in Iranian tradition – the erection of vaults, arcades, small-scale domes. They display unfailing taste in the disposition and combination of these elements. A significant aspect of their architecture is that, despite the apparent variety of layout, an undercurrent of sameness may be detected in them. Religious structures were inherently open to a much wider range of functions which could be served by various elements grafted on to a nuclear plan. But in caravansarais built as parts of a chain little purpose would be served by major changes in layout, unless indeed the physical environment varied. If, as popular tradition has it, Shāh ʿAbbās built most of them, this scale of investment in trading facilities would be an expression of that same capacity to think big, that same awareness of the wider world, which produced the Maydān-i Shāh. Some central office which co-ordinated the provision of these caravansarais may well have existed and thus a standard caravansarai would naturally have evolved.

Seen as a whole, Safavid architecture seems to be less original in structure and decoration than that of earlier schools in Persia. It lacks the internal development of Ottoman and Mughal architecture, being too firmly rooted in the past to encourage innovation. The emphasis on applied decoration brought a new status to the craftsman which is reflected in the proliferation of signed work and of named specialists in calligraphy and in the various techniques of tilework. But the primacy accorded to ornament implied a waning interest in architecture *per se*.

It is often said that the Madraseh-i Mādar-i Shāh (completed 1126/1714) was the last great building to be erected in Persia. Some would energetically dispute this judgement, but it contains more than a grain of truth. Safavid architects had wrung the best out of traditional forms. This left their successors the choice either of imitation or of seeking fresh inspiration from entirely different sources. In the event, 12th/18th and 13th/19th century architecture in Persia generally continues to use established forms and when it departs from these the new elements are usually of European origin.

The principal relic of Nādir Shāh's rule in the early 12th/18th century , his gigantic tomb at Kalāt-i Nādirī, defies this rule.[55] It recreates a long obsolete form – the polygonal tomb tower with engaged columns – but its carved stone orthostats with floral reliefs have a Mughal flavour entirely appropriate to the tomb of the conqueror of Delhi. Contemporary mosques at Kirmān, Rasht and Qum survive, and Nādir added a gilded dome and minaret to the Mashhad shrine.

Shīrāz under Zand rule[56] produced fundamentally retrospective architecture drawing on Safavid, Saljūq and pre-Islamic sources as well as others from India and Europe. The town itself was laid out as a miniature Iṣfahan. The massive bastions of the Arg ape Saljūq brickwork. Other buildings bore bas-reliefs and later tiles with legendary scenes of crypto-Sasanian inspiration.[57] The hypostyle Masjid-i Vakīl (completed 1187/1773–4) copies the lateral halls of the Masjid-i Shāh and has bastardised Sasanian capitals, while its courtyard *īvāns* have corner turrets of Indian type serving as surrogate minarets. More innovatory are the Zand underglaze-painted square tiles, with a new colour range favouring pink, though their vases and cornucopiae are of European provenance. Roses predominate, as is wholly fitting in Shīrāz, famed for these flowers, but their distracting realism minimises the impact of the architecture.[58]

THE QĀJĀR PERIOD

The next major patron of architecture, Fatḥ ʿAlī Shāh Qājār, founded a series of mosques scattered throughout the country – at Qazvīn (completed 1223/1808), Burūjird, Zanjān, Tehran (begun 1224/1809; completed *c.*1256/1840) and Simnān (1242/1826–7) (pl. 25). All bear the name Masjid-i Shāh and feature a large surface area with four-*īvān* plans incorporating broad *qibla īvāns*. A network of small domes and windows ensures that their already spacious interiors are flooded with light. This emphasis on scale naturally recalls Safavid work; indeed, the Qājārs frequently expanded Safavid buildings (e.g. Qum and Māhān, pls. 26 and 38) or imitated their decoration, sometimes quite shamelessly (e.g. golden *īvāns* or domes at Mashhad, Rayy and Qum). Safavid precedents underlie the remodelled bazaars of Qazvīn and Kirmān, with their numerous caravansarais, or multiple foundations like the Ibrāhīm Khān complex at Kirmān. The same general dependence marks much palatial architecture;[59] Sarhangābād near Zavāreh has a miniature Chihil Sutūn, while the Chahār Bāgh-i Khājū in Iṣfahān was a neo-Safavid pastiche.[60]

Some forms, however, were new in Persia, like the deep sunken courtyard of the Masjid-i Āqā Buzurg in Kāshān, or the exaggeratedly bulbous shape of certain Shīrāzī domes (pl. 38). Quintessentially Qājār are the decorative gateways used as entrances to cities (Tehran and Qazvīn), bazaars and military installations (Simnān). Most have a central semicircular arch framed by engaged columns or articulated by minarets, and they are always gaudily tiled. Minarets frequently function as decorative accessories in shrines (Qazvīn, Qum, Māhān) or bazaar entrances (Yazd).

Apart from the huge and derivative Sipahsālār mosque-*madraseh* in Tehran (1295–1308/1878–90) most important Qājār buildings are palaces, from Fatḥ ʿAlī Shāh's hunting box at Sulṭāniyyeh to the Gulistān palace in Tehran, a city within a city.[61] Immemorially ancient forms were preferred, notably the *tālār*, while in the palace gardens open-plan domed pavilions continued to be built. Easily the finest surviving combination of gardens and architecture, the whole shot through with tiny waterfalls, fountains, pools and canals, is the originally Safavid Bāgh-i Fīn near Kāshān.

Military architecture, including barracks, attains a new level of importance under the Qājārs and owes much to French influence (Tehran, Maydān-i Tūpkhāneh). Traditional forms of architecture, such as bazaars, *bādgīrs*, Ḥusayniyehs, *ḥammāms* and caravansarais (notably those on the Dāmghān-Mashhad road) maintained high technical standards though their inherent austerity was sometimes garnished with tilework.

Qājār decoration is usually unmistakable. Simple, rather strident tiled geometric patterns of chevrons, lozenges and various stepped or epigraphic designs in small glazed bricks were especially popular. The repertory of so-called *cuerda seca* tiles now included episodes from the epic and legendary past, portraits of Europeans, scenes from modern life and the country's heraldic blazon of the lion and the sun. Pavilions and palaces bore figural paintings which revived Sasanian royal iconography or betrayed the influence of European illustrated magazines or painted postcards depicting landscapes and tourist spots. A few European architectural forms, such as steeply pitched roofs, decorative fenestration, classical capitals and pediments – and probably rounded arches – were also imported, occasionally with absurd results. European influences mingle with Sasanian and neo-Achaemenid themes in the carved figural stucco of this period (as in many houses in Kāshān). But the Qājār technique *par excellence* – again triggered by European influences, in this case Venetian glass – was mirrorwork. *Muqarnas* cells faced with mirrors yielded an original and spectacular effect, as may be seen in the Gulistān palace or the Hall of Mirrors in the Mashhad shrine. Thus at the very end of its creative development, indeed in its decadence, Persian architecture was able to reaffirm its perennial fascination with surface ornament.[62]



7 SOME VERNACULAR BUILDINGS OF THE PLATEAU

Two definitions will be helpful before embarking on the subject of the vernacular buildings of the Iranian Plateau. As vernacular language is that spoken by the people so vernacular building is that built by the people, or 'Architecture without Architects' as Bernard Rudofsky has called it.[1] Nor should Sir Henry Wotton's well-known description, so often used when an attempt is made to define architecture, be forgotten, 'Well building hath three Conditiones: Commoditie, Firmnesse and Delight.' These conditions provide an admirable yard-stick against which to measure Persian vernacular building. *Delight* is certainly the emotion that overwhelms most people when they first become aware of these buildings. As the function, the subtleties of their design, and their serviceability are appreciated, astonishment confounds admiration.[2]

The architectural language of any country probably owes as much, if not more, to its vernacular tradition as it does to a consciously imposed developed style. But a style of architecture with a capital A, often imported by conquering invaders, may gradually influence the humbler buildings which make up the vernacular. This chicken-and-egg situation gives limitless scope for speculation which cannot be developed here. However, it is intriguing to recognise the strong affinities which exist between the vernacular and the high Architecture both in the realms of planning and in the more obvious similarities of form which must result from the use of similar materials in a similar climate.

Such affinities may spring from spiritual and intellectual as well as practical sources. The three are inextricably integrated. Take, for example, the entrance to the great mosques and that of the humble water cisterns. The relationship of the *īvān* to the domed space which shelters the *miḥrāb* bears an uncanny likeness to that of the porch at the top of the flight of steps which leads down to the domed water cistern found in so many villages. True, there is a similarity of function. Both porches shelter the access to a very precious place; indeed in Muslim as in Christian countries, water and springs of water had a long tradition of sanctity before the coming of the Prophet or of Christ. Another example is that of the similarity of the courtyard plan of many village houses with only one opening to the street and that of the grander counterparts; form follows function. The blank outer walls guard both against the fierce climate, the thief in the night and the throng in the street. Inward turning is an integral part of Persian planning.

The Persian love of decoration which manifests itself in mosques and palaces has its peasant counterprt. The skilful balance achieved between the concentration of pattern and blank space is also manifest in the vernacular. Was it originally Saljūq or native? The pigeon tower near Pīr-i Bakrān (pl. 2) illustrates the point. The gaily decorated bridal trunk on sale in bazaars and the cheerful boxes covered with flattened mineral water or other cans show the exuberant love of pattern seen in fine tilework or carpets.

This chapter is confined to the buildings of the Plateau because the different climate and topographic conditions elsewhere produce a totally different type of building. That to the north of the Alborz Mountains bordering the Caspian, to cite one important exception, is often of timber or timber framed, with pitched roofs and big eaves to throw off the sub-tropical rain.

First, the common denominators which have produced the Iranian Plateau vernacular should be briefly examined: the climate and the local building materials. The Plateau is fiercely hot or cold and generally very dry; much of it is desert. Buildings are therefore heavily insulated. The rare rains can be very heavy but they are dealt with chiefly by instant maintenance. Earthquakes, although a menace, seem to have been generally disregarded in traditional building construction.

The ubiquitous building material is mud – a wonderful material in skilled hands – which can give the humblest building astounding sculptural quality because domes and vaults must take the place of timber for roofs and floors, except in those villages where water has allowed the cultivation of poplars. A Plateau village may therefore present a marvellous pattern of bubble-like domes when seen from a distance (pl. 1), while the long barrel vault

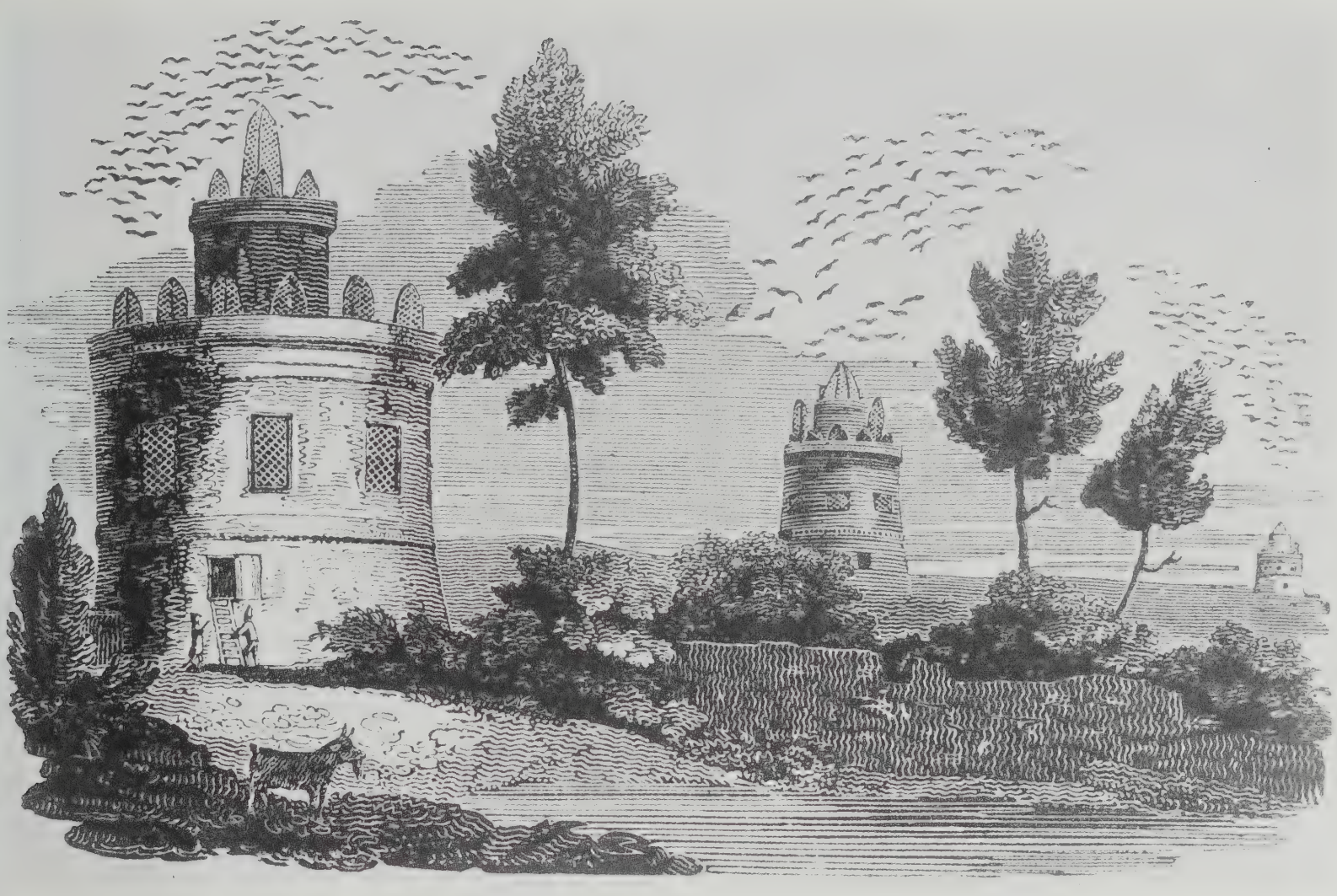
1. A domed village, Sangbāst, in eastern Iran.



2. A pigeon tower at Linjān, near Pīr-i Bakrān.

of a work-a-day building like a sheep-shelter may have the character of a medieval undercroft. The tradition of building in mud is fortunately still alive although richer people in villages may prefer concrete and steel when, not surprisingly, the visual result is all too often as unattractive as it may be in the West. The fascination of using something new, an instinct most of us share, is probably at the root of this rejection of an abundant and beautiful local material.

Mud, *gil*, is used either as baked brick, *ājur*, sundried brick with straw, *hist*, or cob, *chīneh*; this last is a mixture of mud and chopped straw poured and and tamped (often trodden like grapes) between timber shuttering, as is concrete. The ceilings, whether vaulted or flat, as well as the walls, are usually plastered with a mud and straw mixture, *kāh-gil*, so that the whole interior has a marvellous homogeneity. The colour, a soft brown, gives a sense of peace which is enhanced by the quiet play of light. This brings relief as great as that given by the coolness after the outdoor glare and heat. Windows are small – rooms are often lit only from the top of the dome – and this too makes the spatial effect all the more illusive. The buildings which will be considered now have been selected because each in its way has a special fascination and is an unrivalled example of vernacular architecture by any standards.



3. Pigeon towers illustrated in J. Morier's, *A Second Journey through Persia, Armenia and Asia Minor . . . between the years 1810 and 1816.*

PIGEON TOWERS

Pigeon towers were the only vernacular building which aroused the interest of the majority of travellers, like James Morier in the early 13th/19th century (pl. 3). Indeed it would have been as hard for them to be missed then, as now (pl. 4). In the late 11th/17th century there were reported to be over three thousand towers in the Iṣfahān area where several hundred ruined towers still stand. Surprisingly, their purpose was the collection of dung which was particularly good for the melon fields and which was also used in the manufacture of gunpowder. Whereas the chief function of a European dovecot was the production of meat, in Persia the pigeons were not eaten. The pigeon is sacred in the Muslim world through its association with the Prophet himself.

It is difficult to know how many towers are now in use (pl. 5). Perhaps only a dozen or so: near Iṣfahān; in the Gulpāygān area; and on the Afghan border. It was reported in 1891: 'Most of them near Isfahān are in ruins for, as it is no longer the capital, an excessive price cannot be obtained for early melons, so pigeon keeping is no longer profitable.'[3] The only other place where towers have been reported in any number is near Herat – another royal capital where presumably the demands of the court and others made the enterprise worthwhile. Two surviving towers in the *Hazār Jarīb* are believed to date from the reign of Shāh ʿAbbās I.

These pigeon towers were first noted by Thomas Herbert in 1629, 'albeit their houses were neat, yet they were in no wise comparable to their dove-cots for curious outsides'.[4] Had he seen their insides too, he would have been even more impressed.

Astonishing inventiveness has gone into the solution of the basic problem: the provision of the maximum number of pigeon-holes with a minimum amount of building material (pl. 7). Since that material is unbaked mud-brick and cob, plastered with mud, the whole structure must be in compression (timber is little used). The resulting vaults and domes are indivually works of art, but built as they are on ingenious ground plans, their rhythm and the sequence of solid and void which they produce is comparable with the most sophisti-



4 and 5. (*below*) Pigeon towers near Iṣfahān.

6. (*facing page*) The birds fly in and out through the honey-comb brick-work of the small turrets on the roof of a tower.



cated architecture. The typical tower is circular although rectangular fort-like structures are found in some districts. Basically the towers consist of an outer drum, battered for stability and buttressed internally to prevent collapse and to support the inner drum which rises perhaps a third as high again. Galleries are supported by arches, barrel vaults and saucer domes. These domes have holes in their crowns to allow the birds to fly up and down, the top-most being crowned by pepper-pot like cupolas through which the birds enter (pl. 6).

7. The interior of a ruined tower. The pattern of the pigeon-holes is reinforced by the projection of the mud perches below each hole.

ICE-HOUSES (YAKH-CHĀL)

The common use by the Persians of ice and snow for cooling drinks and food was also reported in the 11th/17th century by Dr John Fryer: 'They mightily covet cool things to the Palat. Wherefore they mix snow, or dissolve ice in their Water, Wine or Sherbets.'[5] And later he wrote, 'the Poor, have they but a Penny in the World, the one half will go for Bread, and dried Grapes, and the other for Snow and Tobacco.'[6] Outside Shīrāz he saw that ice was stored in 'Repositories' which he tantalisingly describes only as 'fine buildings' but it seems likely that they were similar to the huge domed structures still to be seen in parts of Iran.[7] By Fryer's time the practice of storing ice was already long established, possibly having been introduced by the Mongols. Incidentally the ice-house of the great 12th/18th-century estate in Britain is as a bantam's egg to an eagle's when compared with those of the Iranian Plateau, where the great demand led to buildings of monumental scale and size (pls. 8–9).

However, the principles governing the design of each are the same: the ice has to be insulated and kept dry. The differing climates make insulation a far greater problem in Iran, and drainage of prime importance in damp, temperate Britain. Obtaining the ice was another matter. Persia is not only largely desert, but fresh water is rare and even in winter, when the temperature falls to freezing at night, the midday sun is hot. Huge quantities of ice would be needed to fill these vast domed wells. Some was brought as blocks of snow from the mountains, but the Persians had an imaginative and simple answer. Alongside the ice-house is a long shallow channel, about 100 × 10 metres and 40–50 centimetres deep, which is entirely shaded by a great wall, longer than the pool and as much as 12 metres high; the wall is constructed of rammed earth and mud-bricks made from the earth which was excavated to form the channel. Most spectacular perhaps was the pair of ice-houses on the outskirts of Sīrjān. The ice-walls which linked them are curved to give extra shade, giving a plan like the outline of some huge winged creature.

C.J. Wills describes ice-making in the latter part of the 13th/19th century:

> The delicious Ab-i-Rookhi (stream of Rukhnabād) is diverted from its course on the first cold night. A few inches of still clear water is collected in the pond, by morning it is frozen, at night the water is again admitted and another inch or two of ice is made. When 3 to 6 inches thick the ice is broken and collected for storage in a deep well on the spot; and so day by day the process goes on during the short winter, until the warehouses are full.[8]

Persians who remember the work in ice-houses confirm this description but say that the ice formed was usually skimmed off in layers of about one inch. It was packed hard down, each layer insulated by straw (and presumably rammed as in Britain). Then the door was sealed and the ice kept until it was needed in summer. The man in charge of the ice-house would probably be responsible for the cistern in the village and other local public buildings. Villagers would be asked to contribute towards his wage and the repairs of the ice-houses.

CISTERNS (ĀB-ANBĀR)

Persian imagination and ingenuity is unrivalled in making the best use of water in the desert and in this the country's contribution to the world's technology is unique; it has been pointed out that other areas such as Central Australia or the deserts of the United States with similar climatic conditions have no agriculture whatsoever. Both water collection and storage are based on long experience. Indeed, the *qanāt* system was recorded during the reign of Darius I, and *qanāts* now in use in the south of the Sahara are known as 'Persian work'.[9] The *qanāt*, or underground water channel, through which water is carried by gravity from a water bearing strata near the base of mountains to a village or oasis on the Plateau is well known but the storage cisterns are less so. Indeed, cisterns are one of the few traditional structures which are still in general use (pl. 10). A deep circular well, about 5 metres in diameter, is protected from evaporation and dust by a dome. It is reached by a









8. (*facing page top*) An ice-house and its shade wall, near Yazd.

9. (*facing page top right*) An ice-house and its shade wall at Abqū.

10. (*facing page below*) A cistern cooled by two wind-catchers, near Yazd.

11. Windcatchers on a cistern[c] at Ardakān.

long flight of steps which tunnel underground to the base of the well; a vaulted porch shades the upper part of the flight. Cisterns are often cooled by wind-catchers in the hottest parts of the Plateau.

A wind-catcher (*bādgīr*) is simply a ventilating shaft which projects above the roof of a building and provides it with air-conditioning of a most effective kind (as in the example from Ardakān, pl. 11). Wind-catchers are among the most spectacular and best-known elements of Persian architecture, yet it is surprising how little information exists about the detail of their interior design. The wealth of local knowledge is chiefly empirical. For instance, two wind-catchers of a simple village cistern which appear to be similar to one another may have different internal plans at ventilator level – an indication of their complexity. Similarly, a low plain-looking tower examined in a ruined house revealed an extraordinary intricate interior with a variety of partitions and baffles in its short height. This has led to a thorough examination of other towers, particularly those attached to cisterns.[10]

There can be little doubt that this efficient form of air-conditioning provides a first-class example of the intermediate technology expounded by the late Dr E.F. Schumacher.[11] A dry prevailing wind of some regularity towards which the wind-catchers face, is probably the only fundamental necessity. The wind itself may be at a higher temperature than the space into which it is introduced since it causes cooling by evaporation, either of water in a cistern or from the skin of the occupants of the room as the dry air passes over the surface.

Soon, alas, it may be too late to look for many of these structures. The extraordinary shapes of eroding mud-brick buildings have long been part of the Plateau landscape and they have been replaced by others built in the same tradition. This has no longer happens so unless positive action is taken to conserve or build at least one example of each kind in the simple vernacular tradition, they will soon have vanished for ever.

Their rapid disappearance derives from a variety of good reasons.

First, few people have had time or inclination to look at these buildings, partly because the huge number which survived until comparatively recently has made them seem commonplace, but also because Iran has such a wealth of archaeological, architectural and artistic treasure which, naturally enough, most visitors want to see first. So until recently the vernacular has not been much prized. There is little new in this. From the seventeenth century on, only a few of the travellers have been sufficiently interested to record the vernacular buildings. They wanted ruins or spectacles. Now, the technological innovations of the first half of this century are the root cause of the redundancy of many buildings. Modern refrigeration, new sources of power, the internal combustion engine and the use of chemical fertilisers have overtaken such buildings as ice-houses, mills, caravanserais and pigeon towers, and many delightful landlords' houses and hunting lodges have been abandoned. Nor will they survive as ruins. A redundant building constructed of stone may survive for years as a ruin, but buildings of unbaked mud-brick or cob will not: inherent in their design is the necessity of constant maintenance. So *firmnesse*, Sir Henry Wotton's first condition, is as much a matter of maintenance as of sound construction in Iran, and maintenance inevitably ceases once a building ceases to be useful.

8 CARPETS



1. Timurid minature, showing a typical 9th/15th-century carpet, B.M. 01-6810 f 39 v.

2. Medallion carpet, late 9th/15th or early 10th/16th century. Cotton warps, three cotton wefts, wool pile, asymmetrical knots. 530 × 222 cm. Calouste Gulbenkian Museum, Lisbon, no. T.97.

3. Medallion carpet with hunting scenes, signed Ghiyāth al-Dīn Jāmī and dated 949/1542–3. Silk warps, three cotton wefts wool pile, asymmetrical knots. 570 × 365 cm., Poldi Pezzoli Museum, Milan, no. 154.

THE EARLY PERIOD

CARPET WEAVING IN the Persian empire has had a long recorded tradition. Xenophon wrote that in Achaemenian times the ancient city of Sardis, then subject to the Persians, prided itself on its carpets.[1] Specific mentions of Sardian pile carpets were made by Athenaeus of Naucratis (about AD 192/230) in his *Deipnosophists*, or *Banquet of the Learned*. He also commented on 'a delightfully embroidered Persian carpet, having some Persian figures and preposterous shapes of Persian griffins and such-like beasts worked on it.'[2]

Knotted pile carpets of the same type as those woven today certainly existed in those early times. This is attested by the discovery in 1949 of a pile carpet in the frozen tomb of Pazyryk in the Altai mountains of southern Siberia, near where the present boundaries of China, Mongolia and the Soviet Union meet.[3] Datable to about 400/300 BC, the field (background pattern) is divided into squares surrounded by a wide border of five stripes. In one of these are elk-like animals, while the main one contains a procession of horsemen in single file. Its provenance has been strongly debated. There are those who maintain that carpet weaving actually began in the regions of Mongolia and Central Asia, and that this carpet was surely woven in the area where it was found because of the similarity of some of its motifs to those on other objects from the same site.[4] Other scholars argue that it was made further west because of the appearance of Assyrian and Achaemenian elements in the design. Furthermore, there is a resemblance in the composition of the carpet to stone slabs in the palaces of these empires.[5] It was thus perhaps woven within the Persian empire. In the absence of concrete information, it is perhaps best seen as an artistic achievement from an epoch in the ancient world in which strong cultural links existed over an area which extended from Greece to Mongolia and even beyond into China.

Whatever its provenance, the Pazyryk carpet was presumably a product of a pile-carpet weaving tradition that had already long existed. But with the exception of some archaeological fragments found at other sites in Central Asia and also in the Fertile Crescent[6], as well as others excavated at Fusṭāṭ (old Cairo),[7] no further examples are known to have survived for a period of some seventeen hundred years, until the discovery in mosques in central Anatolia of three carpets and several fragments that are believed to date from about the 7th/13th century.

Persia has been less fortunate even than Anatolia, for no carpet that can be reliably described as Persian can be dated to much before the early 10th/16th century. Fortunately, however, literary references continue to supply some information.

When in AD 628 the Byzantine Emperor Heraclius pillaged the palace of Khusrau II, the King of the Sasanians (AD 627/8), he found among other textiles soft carpets and carpets embroidered with needles.[8] The soft carpets may well have been pile carpets. A 7th-century Sasanian stone carving at Tāq-i Bustān depicts a fabric draped over the side of a boat. It has a spiral vine pattern, and is regarded by one authority as representing a pile carpet.[9] A famous Sasanian carpet was known as the 'Spring of Khusrau'. This depicted a pleasure garden, and was said to have been worked with gold and silver and embroidered with jewels and coloured stones.[10] It was thus probably not a pile carpet. Moreover, its fate was a sad one, for it was cut up and distributed as booty to the troops at the sack of the capital of Ctesiphon by the Arabs in 21/642.

Arab geographers record Māzandarān, one of the provinces bordering on the Caspian Sea in northern Persia, as an important carpet-weaving centre in the 3rd/9th century, and in the 4th/10th century Bukhārā was also cited as a centre, as well as the provinces of Khūzistān and Fārs in southern Persia.[11] Painters at Tabrīz in the Mongol period in the 8th/14th century depict carpets with geometrical or stylised animal designs. Ruy de Clavijo described the wonderful silk hangings which he saw at Samarqand at the court of Tīmūr

798–808/1395–1405, adding 'and everywhere the floor was covered with carpets and reed mattings'.[12] To judge from 9th/15th-century Timurid miniature paintings (pl. 1) such carpets would have had geometrical designs, repeating rows of octagons, octagons and stars, knot forms and rectilinear border patterns sometimes derived from Kufic script.

LATE 9TH/15TH- AND 10TH/16TH-CENTURY CARPETS

Carpets of this type, continued to be depicted in miniature paintings until the end of the 9th/15th century. In the second half of the 9th/15th century miniature paintings of the Herat school also begin to show carpets with curvilinear patterns. Sometimes carpets of both types appear in the same miniature. Some of these in curvilinear style are similar in spirit to a group of carpets (pl. 2) which have a central medallion and corner-piece composition, similar to that in many book bindings of the period. These are probably the earliest Persian carpets that have been preserved. The field consists of a vigorous array of swirling stems and leaves. These are kept firmly in order by a trellis, which comprises units of four motifs linked by stems. On the vertical axis composite leaf forms with extended arms terminating in a scroll, face alternately upwards and downwards from one another, while on the horizontal axis large, double split-leaf motifs face alternately inwards and outwards from one another. These alternate with composite palmettes. This is sometimes known as the Herati design. But since it was by no means confined only to Herat (the capital of the 9th/15th-century Timurid empire then in the north-east Persian province of Khurāsān), it is termed here the 'in-and-out' design.[13] The leaf motifs were to give way to floral blossoms during the 10th/16th century. But the formula is an extremely traditional one and, in a variety of guises, has been widely used as a carpet design and in other art forms up to the present day. Production of carpets in this design probably began in the late 9th/15th century and continued until well into the 10th/16th. Generally these carpets are associated with north-west Persia, for it was here, at Tabrīz, that the first Safavid monarch, Shāh Ismāʿīl (905–30/1499–1524) had his court. But as with other carpets of this period, attribution remains uncertain.

Only three 10th/16th-century Persian carpets are inscribed with dates. The most famous is the so-called Ardabīl carpet (pl. 4) which contains an inscription from an ode of the 8th/14th-century Persian poet Ḥāfiẓ:

> I have no refuge in the world other than thy threshold
> There is no place of protection for my head other than this porchway
> The Work of the slave of the holy place Maqṣūd Kāshānī in the year 946 (1539/40).

This carpet has a magical quality; the medallion and its radiating ogives, from which extend two lamps, appear to float above the deep blue ground with its floral arabesque pattern. This is a composition of interlacing, undulating stems, one issuing from another in continuous growth. Chinese influence is evident in the treatment of the palmettes and lotus blossoms in the field, as well as in the cloud bands of the inner guard stripe. The 13th/19th-century English textile designer, William Morris, enthusiastically encouraged the Victoria and Albert Museum to buy it in 1893, describing the design as one 'of singular perfection . . . logically and consistently beautiful, with no oddities or grotesqueries which might need an apology and therefore most especially valuable for a museum the special aim of which is the education of the public in art'. The second of the pair, similarly inscribed, is in the Paul Getty Collection at the County Museum, Los Angeles, but it lacks its borders, which were probably used to repair the London carpet.

The third inscribed example is the hunting carpet in pl. 3. This bears in a cartouche the inscription 'by the diligence of Ghiyāth al-Dīn Jāmī was completed this renowned work that appeals to us by its beauty. In the year 949 (1542/3)'. This hijra date is sometimes read as 929, though the later one is now generally preferred. Again a centralised design with a medallion, portions of which repeat in the corners, dominates the field. But here a riotous hunting scene is taking place, in which horsemen and footmen sport with lions and deer. The style of the figures, together with their stick turbans which were the fashion of the time, is identical to that in contemporary miniature paintings. The drawing of the palmette border is curiously stiff and somewhat mars the impact of the lively field.

Though the inscriptions enable these carpets to be firmly dated, there is no comparable evidence to prove where they were woven. Maqṣūd Kāshānī of the Ardabīl carpet was, as his name implies, a member of a family from Kāshān, a town in central Persia long famed for its weaving, and particularly for its silks, but he did not necessarily live or work there. The tradition that associates the carpets with the holy shrine at the birthplace of the Safavids at Ardabīl is questionable, and it appears that they were too big to have been comfortably







4. The Ardabīl Carpet, signed Maqṣūd Kāshānī and dated 946/1539–40. Silk warps, three silk wefts, wool pile, asymmetrical knots. 1051.5 × 553.5 cm. Victoria and Albert Museum, London, no. 272–1893.



5a and b. Medallion carpet with landscape and animals. 10th/16th century. Cotton warps, three cotton and wool wefts, wool pile, asymmetrical knots. 7.01 × 368 cm. Los Angeles County Museum of Art, gift of Paul J. Getty, no. 489.





6. The 'Chelsea' Carpet. 10th/16th century. Silk warps, three silk wefts, wool pile, asymmetrical knots. 541 × 315 cm. Victoria and Albert Museum, London, no. 589–1890.

housed there. It has been suggested that they may have been removed from the shrine of Imām Rizā at Mashhad in eastern Persia, and perhaps even woven there.[14] Similarly the role played by Ghiyāth al-Dīn Jāmī of the Milan hunting carpet (pl. 3) is unknown, and there is no indication of who he was or where he lived. Ghiyāth of Yazd, the famous designer and silk weaver whose name is inscribed on several textiles (see chapter 9) is thought to have worked at the end of the century under Shāh ʿAbbās, and in the circumstances the two are unlikely to be the same person.

The royal court was, often precariously at Tabrīz at the time that these carpets were made. Possibly they were woven there. At the present state of knowledge it must suffice to say that they were an expression of Safavid art of the first half of the 10th/16th century, and that they were probably woven in workshops that had associations with the court.

Shāh Ṭahmāsp (930–84/1524–76) moved his capital further east to Qazvīn in 952/1546, in order to be further away from the Ottoman Turks who were continually menacing his north-west frontier. Carpets at Qazvīn were mentioned by the Carmelite fathers in 1607, though by this time in fact it had ceased to be the capital. 'It is much frequented for trade, for there is an abundance of silk, carpets, brocades.'[15] Unfortunately the reference does not state that carpets were actually made at Qazvīn.

There are several other carpets which have been ascribed on stylistic grounds to roughly the same period as the three dated examples. Most share a centralised medallion plan and have a border consisting of a main stripe in which floral motifs are used in several ways, flanked by two narrow guard stripes. Within this framework the repertoire is extensive. In a land so devoid of water, garden scenes depicting the Persian paradise of trees, flowers and water, exotic animals and birds, were often woven into carpets, enabling Persians to spread on their floors some of those scarce delights. Pls. 5a and b illustrates such a carpet, where wild animals and birds, among them the dragons and phoenixes of Chinese mythology, roam and strut amidst a landscape of cypresses and flowering trees. Cranes fly above the medallion, while heavenly beings known as houris keep watch over the idyllic scene.

In the same vein, though unusually based around not one but several medallions is another exceptional carpet, the Chelsea carpet (pl. 6), so-called after a dealer in that district of London from which the Victoria and Albert Museum acquired it in 1890. The exquisite





drawing of the animal and floral motifs against the dark blue medallions and rich-red field combines a liveliness and a delicacy of touch which is perhaps unsurpassed.

Both in the general layout, where each quarter is repeated, and in design, many 10th/16th-century carpets find parallels in contemporary book covers and illuminations. Some indeed were probably designed by court painters to create a highly sophisticated art which flourished under court patronage. It is a pity that miniaturists were not more realistic in painting carpets for though many are depicted in miniatures, they are seldom faithfully enough drawn to allow comparison with existing examples. The latter were no everyday pieces, but made to enhance mosques as well as to enrich the houses of the court and the nobility in a culture where furniture in the Western sense was unknown. People sat, ate and slept on the floor, which thus become the focal point for one of the household's most treasured possessions. This tradition persists today.

7. Carpet with animal design. 10th/16th century. Silk warps, three silk wefts, silk pile, asymmetrical knots. 109 × 124 cm., Musée du Louvre, Paris, Peytel Gift 1914, no. 6741.

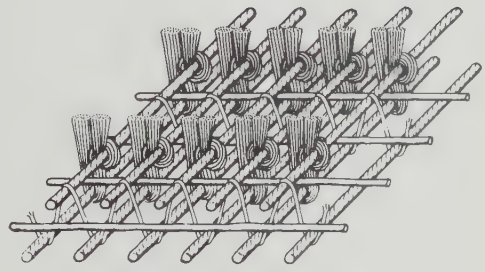
8. Medallion carpet with floral design. 10th/16th century. Silk warps, three silk wefts, silk pile, asymmetrical knots. 245 × 167.5 cm. Metropolitan Museum, New York, no. 14.40.715.

SILK CARPETS

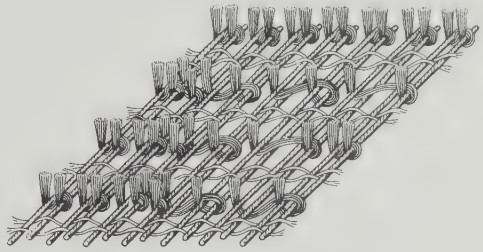
Contemporary with the 10th/16th-century woollen medallion carpets are others that have piles of silk. Sumptuous pieces, these must also have had a longstanding tradition. In the previous century the Venetian ambassador Josafa Barbaro recorded that at the court of Uzun Ḥasan (872–82/1466–78) of the Aq-Qoyunlu (White Sheep Türkmen) at Tabrīz, the king 'caused certain silk carpets to be brought forth which were marvellous fair'.[16] Shāh Ṭahmāsp presented to the Ottoman Sulṭān Selim II on the latter's accession to the throne in 974–5/1566, twenty-five large rugs and other smaller ones in silk and gold, decorated with birds, animals and flowers. Several such silk carpets survive. Of the four large ones, the most famous is the silk hunting carpet in the Museum für Angewandte Kunst in Vienna, with a hunting scene even more lively than that of the woollen-pile Hunting Carpet in Milan (pl. 3) described above. Sulṭān Muḥammad, one of the most famous of the painters at Shāh Ṭahmāsp's court, may have designed the cartoon, so close is the drawing to that of his miniatures (see chapter 13).

Several small silk rugs have been preserved, which are comparable both in quality and in design to the larger ones. (The terms carpet and rug are often used synonymously, though rug usually indicates a smaller size.) The famous Peytel small silk rug in pl. 7 has wild animals, some in combat, in a landscape of flowering plants on a deep blue ground. In the border are animal masks set in lotus palmettes which alternate with floral motifs of an unusual shape. Other examples, such as that in pl. 8, are purely floral, with a centralised design of medallion and corner-pieces with cloudbands, blossoms, and other floral forms on a wine-red field. These 10th/16th-century silk pieces are sometimes known as the 'Large and Small Silk Carpets' of Kāshān. Kāshān in central Persia is well documented for its silk carpets in the early 11th/17th century, as is discussed in detail below.

Several centres probably wove silk carpets. Silk can be spun much more finely than wool and also has considerable strength. It is always used for the finest carpets in terms of the number of knots used and there is no reason why skilled weavers of other regions would not also have made them. The colours of old silk carpets, however, are often faded, since silk tends to retain colour less well than wool, and the original impact of many of them must now be lost. In contrast, the wide variety of rich and subtle colours of the woollen pile carpets have not faded, rather become mellow with age, though many must once have had a brilliance that is now lacking. Dyes were traditionally derived from natural products such as plants and roots, nut husks and vegetable skins, the fibres first mordanted with mineral substances to make them fast.

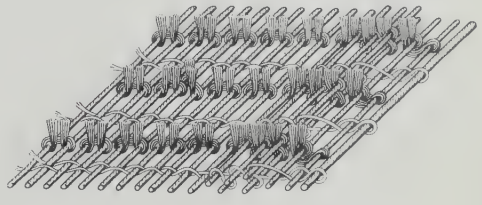


9. The vase-technique weave.



10. Variations in the asymmetrical knot.

11. The symmetrical knot. 9–11 taken from the *Persian Carpet*, Lefevre and partners, London 1977.

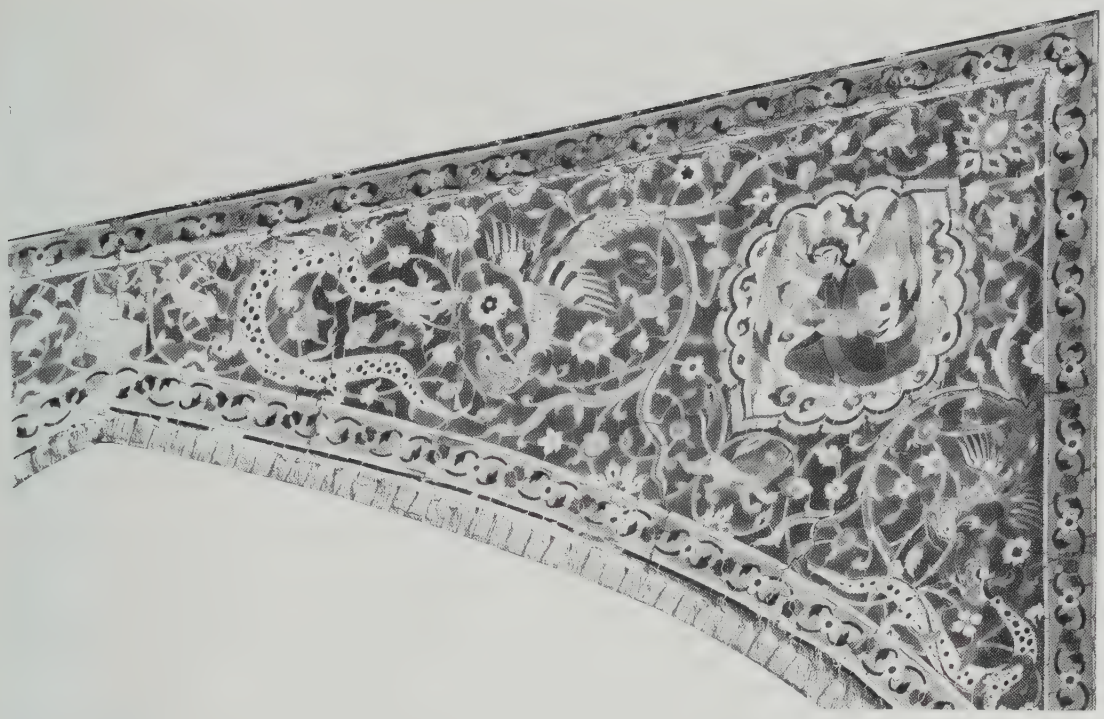


KIRMĀN CARPETS

An important development in carpet studies is the now reasonably firm attribution of another distinctive Safavid group of carpets to the region of Kirmān, capital of an important province in southern Persia. They are widely varied in design (see pls. 12, 13–18) and for this reason in the past had been ascribed to several different centres. But they all share a common structure.[17] This was shown by Dr May Beattie in the exhibition 'Carpets of Central Persia', where a large number of carpets and fragments of this particular group were brought together.[18]

The basis of pile weaving is that knots are tied over vertical warp threads and kept in place by horizontal weft threads. But there are numerous variations in the way that this is done be it in the number of wefts between each row of knots, the type of knot used, the fibres – whether wool, cotton or silk – the side and end finishes etc., and each region has its own peculiarities. The distinctive structure of the Safavid carpets attributed to Kirmān is illustrated in pl. 9. The woollen knots are asymmetrical (pl. 10), and were always used by Safavid urban weavers (as opposed to the symmetrical knot (pl. 11) of later north-west





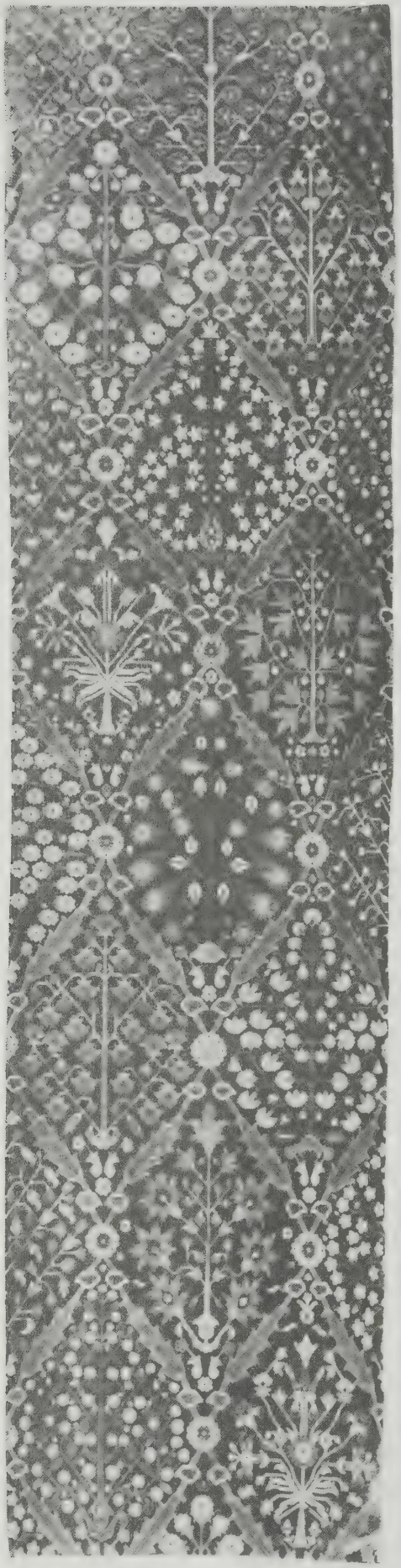
12. 'Sanguszko' medallion Carpet with animal design. Late 10th/16th century. Kirmān region, Vase-technique. 604–322 cm. Collection of Prince Roman Sanguszko, Paris.

13. Tile Mosaic from the Ganj ʿAlī Khān Caravanserai, Kirmān.

Persian rugs and of many tribal rugs); the warps are cotton and lie on two planes (rather than the more usual single plane as in pl. 10) and there are three wefts. The first and third weft are made of wool, and lie hidden in the centre of the carpet; the middle weft is fine silk or cotton and passes from the back plane to the front. When the back or front of the carpet is worn, as inevitably they frequently are, the result is a curious tramline effect that is quite unmistakable. This is now known as the vase-technique, because of the appearance of vases in some of the carpet in the group. With few modifications, this way of weaving carpets is still in use in the Kirmān region today.

Kirmān carpets must have had considerable fame, for it is recorded that they were exported to India during the reign of the Mughal Emperor Akbar (964–1013/1556–1605).[19] In 1012/1604 a Portuguese, Pedro Teixeira, commented that the second best carpets were woven in Kirmān: 'The richest and finest and most esteemed', he wrote, 'were made at Yazd, and in Khurāsān the third best.'[20] Many chroniclers spoke of the fame of the carpets of Yazd, yet nothing is known of what these carpets were like. Probably it shared production of the vase-technique carpets with Kirmān, or perhaps it wove another as yet unidentified group. Jean Chardin, a French Huguenot jeweller who stayed in Persia in the latter part of the 11th/17th century, noted that the carpets commonly known in Europe as Turkey carpets, because they had arrived by way of Turkey, were manufactured in the province of Kirmān and particularly Sīstān.[21] Unfortunately he never went to either place, and such information was probably hearsay. His comment does suggest, however, that at least some of the Persian carpets known in Europe at that time were said to have come from Kirmān.

The most impressive of the vase-technique carpets now assigned to Kirmān is the Sanguszko group, so-called after Prince Roman Sanguszko whose collection has the most outstanding example (pl. 12). It is one of the great achievements of Safavid weaving. The centralised medallion plan is similar to that of the 10th/16th-century carpets associated with Shāh Ismāʿīl and Shāh Ṭahmāsp described above, but the style of the drawing and the colours are quite distinct. In the centre, pairs of figures in roundels surround an animal combat within an arabesque of strapwork. Other animal combats, an allegorical theme of good and evil long popular throughout the East, take place in the field while horsemen sport in the corners. Lobed roundels in the border contain houris, animal combats, or confronting peacocks, while fighting phoenixes and dragons swirl about them. It is a carpet of sumptuous colour and great vitality and, together with others that are closely related, was probably woven in the last years of the 10th-16th century or early in the 11th/17th. This dating is suggested by some mosaic tile spandrels in a caravanserai in the Kirmān bazaar, where a plaque records the date of completion as 1006/1598. The motifs in these spandrels are strikingly similar to many of those on the Sanguszko carpets. Compare, for example, the winged figure in the lobed roundel and the phoenix and dragon combats in the tile mosaic in pl. 13 with those in the border of the carpet in pl. 12, the carpet in pl. 5 and also the similarity in the drawing of the other animals. Nothing exactly comparable is known



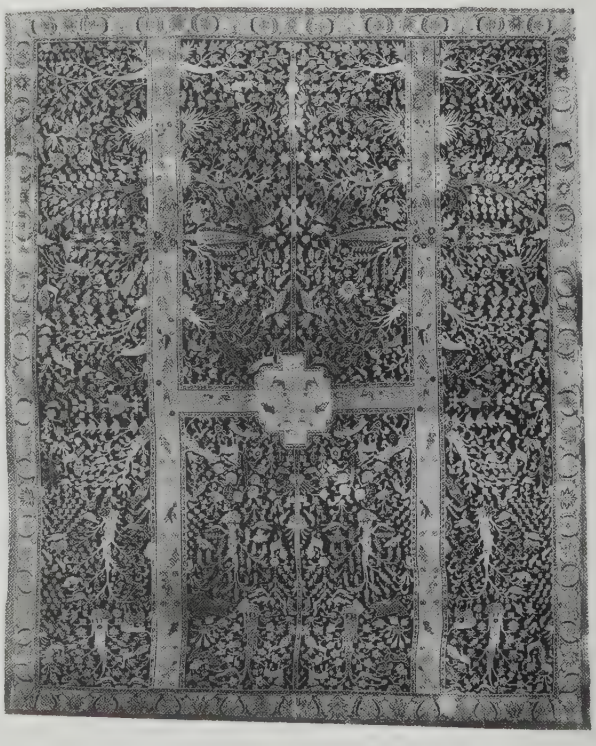




elsewhere in Persia, which further emphasises the attribution of the carpets to Kirmān. The caravanserai is named after Ganj ʿAlī Khān who became governor of Kirmān in 1004/1596. Ganj ʿAli Khān was an old friend and ally of Shāh ʿAbbās. He made Kirmān an important and prosperous provincial capital, by encouraging the trade of the city, which he embellished with several fine buildings.

Another famous design in the vase-technique group is illustrated in the carpet fragment in pl. 15. What at first sight appears to be a random scattering of palmettes, rosettes and other floral forms, sometimes also vases, over the field, can be seen on closer inspection to be confined by three different systems of stems forming lattices on different planes. It is thus known as the three-plane lattice design. A panel of tiles in the Friday Mosque at Kirmān has





a similar composition. Unlike that in the Ganj ʿAlī Khān caravanserai this is not easily datable, since the building has been restored several times. But once again the design appears to be unknown anywhere else in Persia, and appears to be part of a distinctive Kirmān repertoire. The carpet fragment illustrated in pl. 15 is probably one of the earliest three-plane lattice examples, perhaps dating from the second half of the 10th/16th century, and has a lively, almost electric quality that is lacking from the serenity of later examples. If not as immediately impressive as the animal or hunting carpets, good examples of carpets in this design rank among the masterpieces of Safavid art too.

Designs of landscapes and gardens were also popular among the vase-technique group. The lively carpet in pl. 16 has been described as a bird's-eye view of a woody landscape, seen through festoons of spiralling creepers.[22] It probably dates from the first half of the 11th/17th century. Another carpet follows the general layout of a classical Persian garden (pl. 18), where water channels and pools containing fish and ducks are flanked by flowering trees. Colourful birds preen themselves, while wild animals prowl beneath. F.R. Martin, who wrote one of the earliest histories of Oriental carpets,[23] considered this carpet to be a vivid illustration of what the Sasanian 'Spring of Khusrau' carpet (described above) must have been like. The unusual, almost square format, with the focal point not placed in the centre may mean that this was only a part of what was intended as a much larger carpet, never completed. Alternatively it has been suggested that the shape was perhaps a result of European demand for a size more appropriate to the drawing and dining room than the long, thin format traditional to Persia.[24] The rather poor drawing of the animals, and the crowding of the design suggest a date late in the 11th/17th century. Carpets with rows of offset flowering plants (such as pl. 17) were probably woven from the second half of the 11th/17th century until well into the 12th/18th. This was a popular design for contemporary textiles too. Similar plants were used to decorate Indian carpets and textiles of the same period, though there the treatment tended towards a greater naturalism.

Another Kirmān design is a single-plane lattice containing flowering plants, such as that in the fragment illustrated in pl. 14. Some carpets in this design can be dated to at least as late as the mid-12th/18th century. A similar piece bears the date 1172 (1758) and also the name of the weaver, the Master Craftsman Muḥammad Sharīf Kirmānī.[25] Carpets in the Safavid tradition were thus still being woven at Kirmān several years after the fall of the dynasty in 1148/1736 at a time that is usually considered devoid of artistic achievement.

Only one other known vase-technique carpet is signed and dated. This carpet has a multiple medallion design.[26] Three inscriptions indicate that the weaver was the Master Craftsman Muʿmin, son of Quṭb al-Dīn Māhānī, and that it was woven between 1066 and 1067/1655 and 1656. Several fragments survive, which are believed to be separately woven parts of at least one large carpet. Recently their presumed overall measurements and those of the shrine of Nūr al-Dīn Niʿmatallāh at Māhān, which lies some twenty miles east of Kirmān, were found to be identical. The weaver was from a local family as his name indicates and these pieces must thus have been woven in a local workshop for the town's holy shrine. Māhān still has a strong tradition today for the weaving of carpets which are indistinguishable from those of nearby Kirmān.[27]

There is thus considerable evidence to support the attribution to Kirmān of the vase-technique group of carpets. The structural aspects, which are very similar to those still in use there today, are of prime importance. When asked why they weave in this technique, weavers invariably reply that this is the way carpets have always been woven in Kirmān. Regional weaving traditions are thus still strong. To what extent techniques in use today can help establish provenance of other groups of Persian carpets has yet to be investigated. But the results of grouping on the basis of the structure of the vase-technique carpets have been so successful that it is to be hoped that such systematic analysis will be widely adopted in future research.

Facing page

14. (*far left*) Carpet fragment with single plane lattice design. 12th/18th century, Kirmān region. Vase-technique. 399 × 101.3 cm. Burrell Collection, Glasgow Art Gallery and Museum, no. 9–7.

15. (*top left*) Carpet fragment with three plane lattice design. Late 10th/16th or early 11th/17th century, Kirman region, Vase-technique. 244 × 144 cm. Museum für Islamische Kunst, Preussischer Kulturbesitz, Berlin, no. 1-8-72.

16. (*top right*) Carpet with large blossoms and sickle shaped leaves. Early 11th/17th century, Kirmān region. Vase-technique. 265 × 195 cm. Corcoran Gallery of Art, William A. Clark Collection, no. 26-278.

17. (*bottom left*) Carpet with flowering plants. 11th/17th century, Kirmān region. Vase-technique. 267.5 × 175 cm. Metropolitan Museum, New York, no. 22.100.76.

18. (*bottom right*) Garden carpet. Late 11th/17th century, Kirmān region. Vase-technique. 531 × 432 cm. The Burrell Collection, Glasgow Art Gallery and Museum, no. 9-2.

19. Carpet with blossoms and birds. Late 10th/16th or early 11th/17th century, perhaps Herat. Silk warps, three cotton wefts, wool and cotton pile, asymmetrical knots, brocading in silver and silver gilt strip covered thread. 370 × 178 cm. Thyssen-Bornemisza Collection, no. 651A.



'HERAT' CARPETS

Herat had been the Timurid capital in the 9th/15th century, but its fortunes were varied in the 10th/16th century. Khurāsān, of which it was the capital, was well known for its carpets. Though, as we have noted, it only ranked in third place after Kirmān and Yazd, according to Pedro Teixeira in 1604, none the less, some of the finest and richest carpets were woven in Khurāsān, and it was also famed for its silks, especially its velvets, which, in the 10th/16th century, were said to rival those of Genoa.[28]

Unfortunately, Teixeira did not describe these fine carpets, and we have no indication of what they were like, nor if the carpets that are usually associated with Herat were indeed made there. The most famous of these are the two known as the 'Emperor's carpets', which were said to have been gifts of Peter the Great of Russia to Leopold I, Emperor of Austria,



20. Carpet with animal and floral design. 10th/16th century, perhaps Herat. Silk warps, three silk wefts, wool pile, asymmetrical knots. 740 × 325 cm. Metropolitan Museum, New York, no. 43.121.1.

in 1110/1698. One of these is illustrated in pl. 20. Upon the characteristically deep pinky-red field, fantastic floral blossoms, some swathed in cloud bands, are placed among a swirling array of birds, animals, some in combat, chinese dragons and chi'lin, leaves and other blossoms linked by a trellis of stems, sometimes arranged in in-and-out fashion (see pl. 2) to give a shimmering, almost mosaic effect. The dark blue-green border provides the ground for further blossoms, cloud bands and leafy stems.

Some examples in the group are enriched by silver and gold thread (pl. 19). Here the principal blossoms, arranged in in-and-out units, are worked in white cotton to give an added brilliancy to the field, upon which elegant pheasants and other birds float.

These magnificent carpets have often been grouped together with others that have somewhat similar, though simplified designs.[29] The latter group have been variously termed Indo-Persian, Indo-Iṣfahān, Shāh ʿAbbās, Iṣfahān as well as Herat. Numerous examples were apparently exported to Europe, for they are often depicted in European paintings, particularly of the 'genre' type from the late 10th/16th until well into the 12th/18th centuries. In a recent article it has been suggested that these carpets were woven in India, and that they form a group quite distinct from those such as are illustrated in pls. 18 and 20.[30]

In the inner guard stripe of the border of the Emperor's carpet (pl. 20) are verses in praise of the shāh. Unfortunately, it does not indicate which shāh is so praised. M.S. Dimand, the American scholar, believed that it was Shāh Ṭahmāsp and that these carpets were made for him. Ṭahmāsp's brother, Bahrām Mīrzā, was indeed governor of Herat for some years in the early 10th/16th century but he died in 956/1549, however, and the style of the drawing of the motifs in the carpet does not suggest such an early date.

Herat changed hands several times in the course of the 10th/16th century. Carpets of this quality could presumably only have been made under reasonably settled conditions and enlightened patronage, which prevailed briefly in the late 10th/16th century under ʿAlī Qulī Khān Shāmlū and then again under his son Ḥusayn Qulī Khān Shāmlū from 1007/1599 until well into the 11th/17th century.[31] The Herat carpets (if they were indeed woven at Herat, for this has never been proved) may thus have been woven during the second half of the 10th/16th century or in the early 11th/17th.

THE PERIOD OF SHĀH ʿABBĀS

At the end of the 10th/16th century, Shāh ʿAbbās moved the capital from Qazvīn to Iṣfahān, where he sought to create a city of unprecedented splendour. He himself was said to be a skilled weaver of carpets, and he established several court manufactories at Iṣfahān, though unfortunately it is not known what type of carpets these produced. His palace was lavishly adorned with carpets. Thomas Herbert, who accompanied the ill-fated embassy of Sir Dodmore Cotton sent by King Charles I of England remarked upon 'the ground or floor, spread with carpets of silk and gold, without other furniture'.[32] Diplomatic presents often included carpets. Anthony Sherley, who came to Persia as self-appointed representative of Elizabeth I of England and was later sent to Europe as the shāh's ambassador by Shāh ʿAbbās, was given numerous lavish gifts by the Persian monarch. Among them were 'six mules, each carrying four carpets, four of silk and gold, six clear carpets, the rest very fair crewel carpets'.[33]

Those seeking to trade in carpets, however, apparently met with little success. A letter of 1028/1619 to the East India Company in London from one of its agents in Iṣfahān reported that carpets were denied him in order that he should be forced to pay the price that the king demanded for silk.[34] An even more hopeless letter of five years later commented that nothing could be expected from such an an inconstant and false people but entanglement and uncertainty in their trade.[35]

SILK CARPETS AND GELĪMS OF THE SHĀH ʿABBĀS PERIOD

Silk carpets worked with gold and silver thread must have dazzled foreign visitors. They seem to have been very much a feature of the time, reflecting the taste for sumptuous, glittering fabrics and prized by Persian and foreign nobility alike. Many found their way to the princely houses of Baroque Europe.

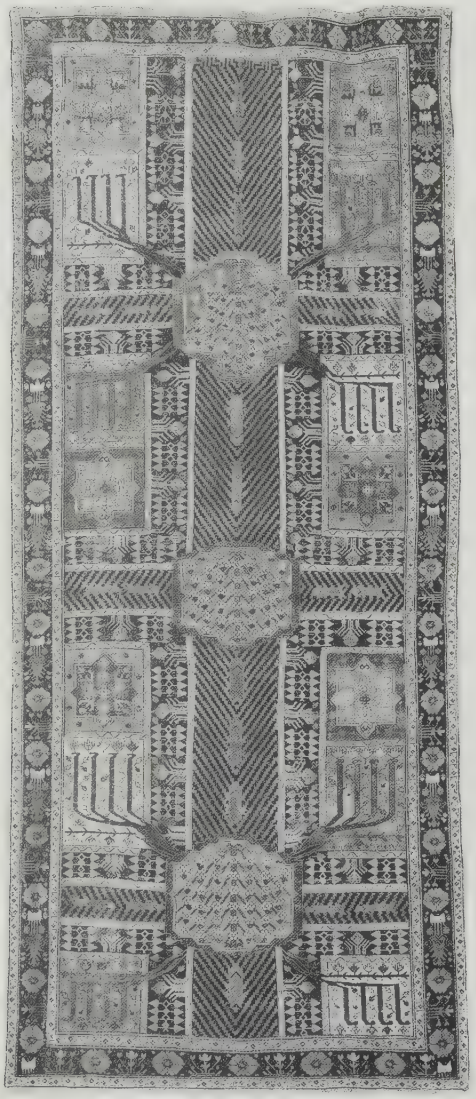
On the basis of documentary evidence, Kāshān is the one centre to which at least some examples can be unhesitatingly ascribed. The making in Kāshān of 'very fine carpets of silk and gold, brocades, velvets and other stuffs' as well as 'tissues of the Arras kind' (by which was presumably meant tapestry woven rugs known in Persia as 'gelīms') that the Carmelites described in 1015/1607,[36] is recorded in some detail. In 1010/1601 an Armenian merchant was sent to Kāshān by King Sigismund III Vasa of Poland expressly to order silk and gold rugs, tapestry woven rugs, a tent and other fabrics. Together with the expenses of his

21. Gelīm with Floral design, containing the Vasa Arms of Poland. About 1010–11/1601–2, probably Kāshān. Silk warps, silk wefts enriched with silver and silver gilt strip. Slit Tapestry weave. 246.25 × 135 cm. Munich, Residenz Museum, no. WC3.





22. 'Polonaise' carpet with medallion design. 11th/17th century. Cotton warps, two cotton and one silk wefts, silk pile, asymmetrical knots, brocading in silver and silver-gilt strip covered thread. 204 × 142 cm. Keir Collection, London.



journey and the cost of the carpets, an extra charge of five crowns for the weaving of blazons is noted in the merchant's accounts, which still survive.[37] Two complete gelīms bearing the Vasa arms (pl. 21) exist today, and were almost certainly part of that consignment. They are thus datable to the same year, 1010/1601. The gold and silver thread is now much tarnished, and the original colours faded. When the colours were fresh, the visual impact must have been very powerful, even garish, attesting to a taste not found currently among European collectors, who prize the mellowed quality of old Persian carpets.

'POLONAISE' CARPETS

'Baroque splendour'[38] aptly describes the effect of some related silk pile carpets (pls. 22 and 25), some of which may also have been made in Kāshān. One of them bearing some family arms, believed at the time to be the Polish Czartowski's, was exhibited at the Paris World exhibition of 1878. But because so little was known of Oriental carpets then, it came to be believed that such pieces had actually been made in Poland. They thus became known as 'Polish' or 'Polonaise' carpets. It has since been universally recognised that they were not made in Poland, but 'Polonaise', with its sense of dance and rhythm, remains a not inappropriate term. That illustrated in pl. 25 has retained its original brilliant orange-red, lime-green and yellow colours. Rows of medallions in silk pile lie amid a riot of floral decoration against a ground of silver and gold brocade. The placing of the medallions in an off-centre arrangement is unusual and it is possible that the carpet was made to lie end to end with its pair.[39] 'Polonaise' carpets appear to have been made specifically in pairs, and were presumably meant to be used together. There are several variations in design: another pair (pl. 22) has a star-shaped medallion in a field of different colours divided by broad arabesque scrolls and a border of reciprocal crenellations.[40]

How long the manufacture of silk carpets and gelims continued in Kāshān is not known. Chardin noted 'a thousand houses of silk weavers' there in the 1080s/1670s, though he did not specifically mention carpets.[41] Doubtless other centres were also weaving silk carpets, among them Iṣfahān and probably Khurāsān and Kirmān as well.

GELĪMS

Alongside purely floral gelīms such as those with the Polish arms described above are others that include animals and birds, human figures, sometimes in cartouches. An unusual example now in the Louvre contains scenes from Persian mythology (pl. 24). The horseman fighting a spotted dragon perhaps represents Bahrām Gūr, in one of his many exploits described in Firdausī's *Shāh-nāmeh*, or Book of Kings. In the corners sit Laylā and Majnūn in an episode from the charming story by Niẓāmī. Layla's camel is held by an animal, one of the wild beasts tamed by Majnūn in the desert where he had been forced to flee because of parental disapproval of his love for Laylā. Traditional themes such as these were among the most popular in the repertoire of Persian miniature painters and also textile designers, but are uncommon in carpets. It is not even known where this gelīm was woven.

12TH/18TH CENTURY CARPETS

Probably dating from the last years of the Safavid dynasty in the early 12th/18th century or even later are some interesting tree carpets. That illustrated in pl. 26 has rows of red, pale blue and salmon coloured cartouches from which rise trees with leafy or flowering branches on a dark blue ground. The more naturalistic drawing of the border admirably offsets the rather angular style of the field. It has been suggested that the cartouches were derived from border designs found on some of the early Herat rugs,[42] and an attribution to Khurāsān is further suggested by the fact that carpets of this group have asymmetrical *juftī* knots (see pl. 10). These are tied over four warps rather than the usual two, thus substantially reducing the amount of wool used with obvious detriment to the wearing qualities of the piece. This technique is common in 12th and 13th/18th and 19th centuries carpets of Khurāsān (see below), though it is not unknown elsewhere. On stylistic grounds these carpets are often attributed to north-west Persia or the Caucasus, but this is unlikely since in those regions carpets are usually tied with symmetrical knots (pl. 11).

The garden carpet in pl. 23 was probably woven sometime in the early 12th/18th century, perhaps in Kurdistān in the west of Persia. It is an obvious stylised derivation of the Safavid vase-technique garden carpet in pl. 17. But what it lacks in detail it makes up for by the boldness of its composition and the brightness of its colours.



24. Gelīm with medallion and scenes from Persian mythology. 11th/17th century. Silk warps, silk wefts eariched with silver and silver-gilt strip. Slit tapestry weave. 249 × 139 cm. Musée du Louvre, Paris, Doistau Gift, no. 5946.

23. (*facing page*) Garden carpet. Late 12th/18th or early 13th/19th century, north-west Persia. Cotton warps, two cotton wefts, wool pile, symmetrical knots. 547.5 × 230 cm. Metropolitan Museum, New York, no. 67.156.



25. 'Polonaise' Carpet with multiple medallion design. First half 11th/17th century. Cotton warps, two cotton and one silk wefts, silk pile, asymmetrical knots; brocading in silver and silver-gilt strip covered thread. 410 × 180 cm. Colnaghi, London.



26. Carpet with cartouche and tree design. Early 12th/18th century, probably north-east Persia. Cotton warps, three wefts, sometimes cotton, sometimes wool, wool pile, asymmetrical jufti knots. 634 × 254 cm. Keir Collection, London.

With the final collapse of the Safavid dynasty in the face of the Afghan invasion in 1135/1722, the country entered a disturbed period. Little is known about carpet production, since few examples have been preserved.[43] Nādir Shāh who seized power in 1148/1736, and ruled until 1160/1747, was intent on expanding his empire and does not seem to have much patronised the arts. He had a fortress at Kalāt-i Nādirī north of Mashhad in the province of Khurāsān, however, and he did decorate the walls of a pavilion there with flowering shrub motifs that are Indian in style. These may have been carved by Indian craftsmen he is known to have brought back with him after his attempted conquest of India.[44] One portrait of him (see chapter 14 pl. 3) shows him kneeling on a carpet that has similarly Indian-inspired floral motifs in the border. The field pattern consists of a central medallion surrounded by a lattice of rosettes and stylised lotus buds. These are loosely arranged in units of four in the traditional in-and-out design described above (see pls. 2, 19 and 20) with floral sprays issuing from them. The ground colour is red, with the pattern worked mainly in yellow and ivory.

Pl. 27 has a similar field with floral blossoms in the in-and-out design, though it is different in colour, with the pattern in light and dark blue, red and pink, on an ivory ground it is woven with the *juftī* knot (see above) which suggests that it was made in the province of Khurāsān. As will be discussed below, Khurāsān was a well known centre for carpets at the end of the 12th/18th century and in the 13th/19th century. Several examples, with their distinctive structure, have been preserved from this later period but it is not known when



27. Carpet in the in-and-out blossom design. probably mid-12th/18th century Khurāsān. Victoria and Albert Museum, London no. T.65–1927.



28. Carpet in *mille fleurs* design. Second half 12th/18th century, perhaps Shīrāz. Victoria and Albert Museum, London no. T.99–1973.



29. Oil painting with a girl dancing upon a carpet. Attributed to Sayyid Mīrzā, second quarter 13th/19th century. Victoria and Albert Museum, London, no. P.21–1933.

32. (*facing page below*) Carpet with design of flowering shrubs. Late 12th/18th or early 13th/19th century, Khurāsān. Cotton warps, three cotton wefts, wool pile, asymmetetrical juftī knots. 373 × 175.5 cm. Victoria and Albert Museum, London, no. T7–1942.

the manufacture of such carpets began in Khurāsān, or whether there was any connection with these and the carpets associated with Herat (see above and pls. 19 and 20). The carpet illustrated here (pl. 27) appears to be an early example, of this type of Khurāsān carpet and was probably made at about the same time as the portrait, around the mid-12th/18th century. It is of course not impossible that Nādir Shāh himself was responsible for establishing this industry in Khurāsān, where he had his capital at Mashhad.

Kirmān was still busy at its looms, weaving large carpets in the Safavid manner in the mid-12th/18th century, as is shown by the vase-technique lattice and flowering-shrub carpet dated 1172–3/1758 described above. A number of other similar Kirmān carpets have been preserved, demonstrating that carpet weaving was still very much alive despite the unsettled political conditions following the murder of Nādir Shāh in 1160/1747. It was not until 1172/1759 that some sort of peace was established, at least in the south of the country. This was achieved by Karīm Khān Zand (1163–93/1750–79) who made his capital at Shīrāz, which he transformed into an elegant and charming city. Carved stone and tile panels with flowering plants, echoing the Indian style of those at Kalāt-i Nādirī, were widely used to decorate mosques and palaces. A new vocabulary of colours was introduced at this period, with a predominance of soft pinks, pale blues and greens often used on a white ground. These are the colours of *famille verte* Chinese porcelain, though the viability of this connection is as yet undecided.[45] The carpet in pl. 28 is similar in design and in colour to such tile panels and was perhaps woven at Shīrāz. Such carpets are known as *mille fleurs* carpets. Several examples have been attributed to India, but the one illustrated here differs quite substantually both in colour and in design as well as in structure from the Indian ones.

An unusual carpet illustrated in pl. 30 demonstrates the new range of colours. The ground is salmon pink and the pattern dominated by bright yellow and red. It also introduces a new motif, for the field is composed of *būtehs* (the Persian for bush or shrub), which seem to derive from an Indian plant form which had evolved by the late 12th/18th century into its present characteristic shape, rather like a pine cone whose top inclines to one side.[46] It is most famous as a motif for the shawls of Kashmir and Kirmān, and later those of Paisley, the name by which it is best known in the West. This carpet is made in the vase-technique, which identifies it as a product of the Kirmān region. Yet it is quite different in design and in colours from the ones described above, and illustrates the changes that had probably begun with Nādir Shāh but were further evolving under the Zands.

13TH/19TH-CENTURY CARPETS

The Qājārs (1210–1343/1796–1925) brutally eliminated the Zands and set about the reunification of the country. They established their capital at Tehran, and a new period of prosperity began. The arts were lavishly patronised and the carpet industry seems to have been gradually revived on a larger scale. Although many traditional designs were retained, they were expressed in different ways, often smaller in scale than their Safavid prototypes, and employed in a revised, brighter, range of colours.

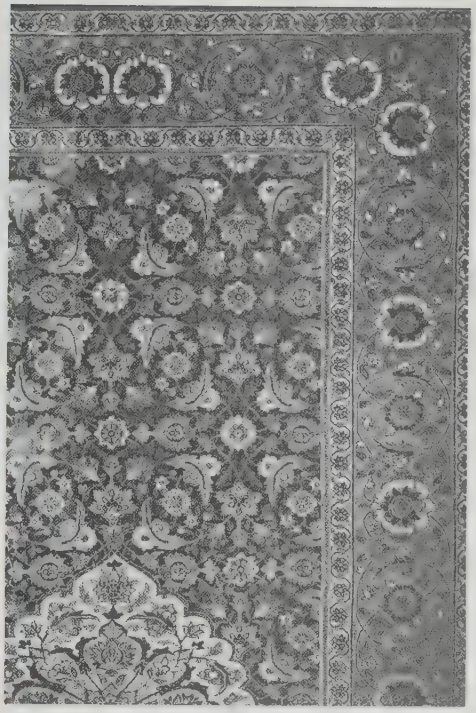
The lively life of the court is reflected in large oil paintings, in which carpets are often depicted. These usually have small all-over designs of floral scrolls or arabesques, floral motifs sometimes arranged in the in-and-out formula and simple lattices of rosettes or flowers. A dancing girl (pl. 29) in a painting attributed to the early 13th/19th century painter Sayyid Mīrzā, cavorts on a typical carpet which is not dissimilar to the carpet illustrated in pl. 31. This was probably woven in Khurāsān in the late 12th/18th or early 13th/19th century and has a central medallion and a field design composed of units of four floral motifs, feathery lotus-leaf forms on the vertical axis and stylised lotuses on the horizontal, arranged in the in-and-out formula. Sickle-shaped leaves and rosettes swirl around them. The field colour is dark blue, while the motifs are predominantely rusty-red, pale and dark blue and ivory.

KHURĀSĀN CARPETS

Another Khurāsān carpet (pl. 32) has a directional design of rather stylised flowering shrubs and birds, framed by a border with a meander of stems and formalised trees. As noted, Khurāsān colours are distinctive, with pinky reds, pale blues and ivory, often set against a dark blue ground. All share a common structure of asymmetrical *juftī* knots (see pl. 10), cotton warps and wefts, three shoots of wefts between each row of knots, and side finishes of a single bundle of warps usually overcast in red. Qā'īn, Duruksh, Bīrjand and Mud in eastern Khurāsān were the main carpet weaving centres in the province in the 13th/19th century, and the two carpets illustrated in pls. 31 and 32 were probably woven in one or another of them.



30. Carpet with a design of *būtehs*. Probably late 12th/18th century, Kirmān region. Vase-technique. 365 × 211 cm. Lefevre and Partners, London.



31. Medallion carpet in the in-and-out blossom design. Late 12th/18th or early 13th/19th century, Khurāsān. Cotton warps, three cotton wefts, wool pile, asymmetrical juftī knots. 512.5 × 266.25 cm. Victoria and Albert Museum, London, no. 256–1892.





33. Carpet with stylized blossoms. 12th/18th or early 13th/19th century. Kurdistān, west Persia. Wool warps, one wool weft, wool pile, symmetrical knots. 265 cm. Victoria and Albert Museum, London, no. 388–1880.

34. Carpet in the in-and-out blossom design. 13th/19th century, Kurdistān, west Persia. Cotton warps, one wool weft, wool pile, symmetrical knots. 330 × 180 cm. Victoria and Albert Museum, London, no. 390–1880.



According to a report of 1790 by the East India Company, which was trying to revive trade with Persia after a lapse of several decades, 'carpets in abundance' were exported from Khurāsān to Europe. These were described as the principal manufacture of the province, 'which for the brightness of their colours and the excellence of their workmanship, are deservedly in high estimation all over the world'.[47] The excellence of Khurāsān carpets was still being praised by Lord Curzon in 1889.[48]

CARPETS OF KURDISTĀN

In western Persia, Kurdistān was also a prolific weaving area. The design of the large blossoms in the carpet in pl. 33 is obviously inspired by the 11th/17th-century vase-technique, three-plane lattice carpets (see pl. 15). The original concept of the intricate systems of lattices is lost, but the idea remains. The in-and-out design was – and still is – especially popular in Kurdistān. A comparison between the design of the Khurāsān carpet in pl. 31 and that of the Kurdish example in pl. 34 might suggest they have an identical origin. But the Kurdish carpet has warmer, richer colours and is structurally quite distinct, with symmetrical knots, a single woollen weft and cotton warps. The side finish consists of a single bundle of warp threads overcast in red. It was probably woven somewhere in the region of Sinneh (now called Sanandaj, the capital of Kurdistān). The in-and-out design, further compressed into a minute scale, indeed became almost the hallmark of the extremely finely woven rugs that Sinneh began to produce from about the mid-13th/19th century. This version appears in the medallion of the gelīm in pl. 35, which has a field of *būtehs*, another of the many designs found throughout the country. Such fine tapestry weaving was another feature of this productive region. Among the earliest known carpets from Sinneh are some that probably date from the early 13th/19th century, which have a stylistic quality of their own. That in pl. 36 has a diamond-shaped medallion from which extend four *būtehs*. Strange forms that appear to be stylised vases appear on the dark blue border and also on the red ground of the corner-pieces. Its plan is based on the classical medallion and corner composition of 10th/16th-century Safavid carpets, though its details show a clear departure from the traditional style. The structure of the carpet is typical of Sinneh, with symmetrical knots, a single cotton weft and cotton warps. The outer guard stripe of this example, which was probably identical to that of the inner, is unfortunately missing.

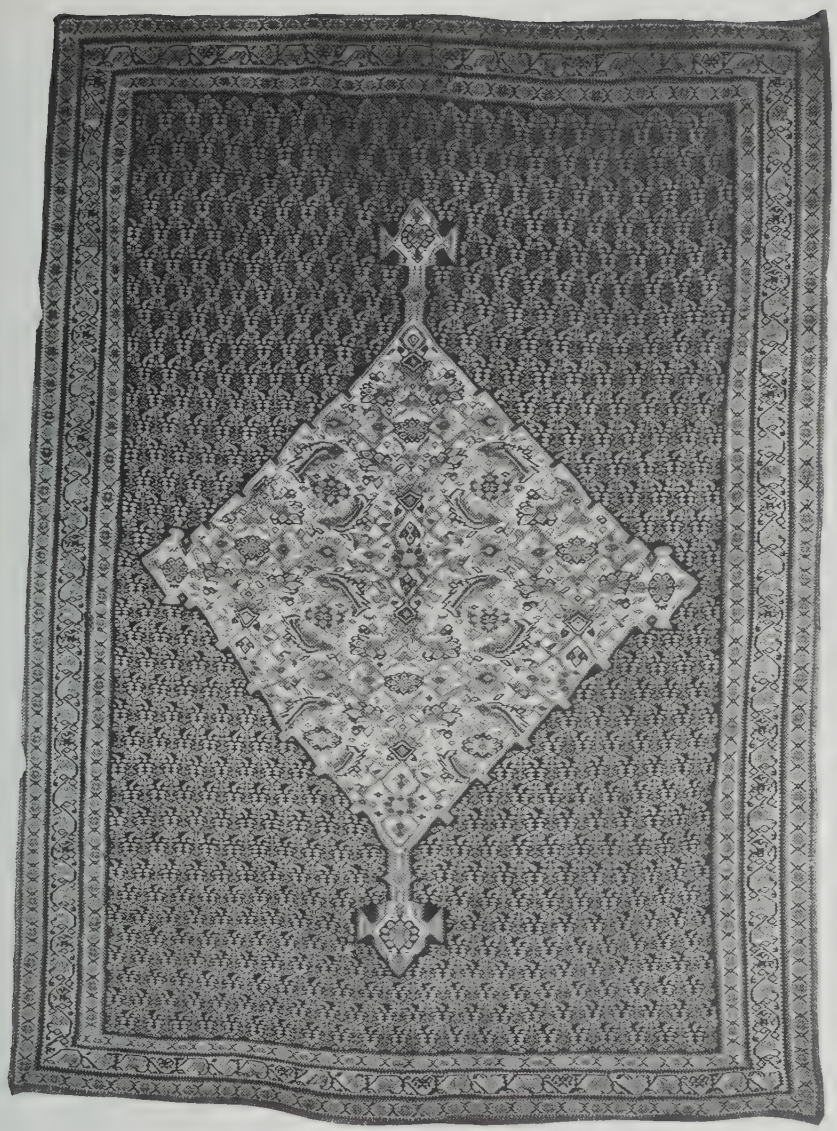
Sinneh rugs were well known in Europe. In 1269/1854 H.P. Seymour noted that of Persian carpets 'the finest are made at Senna, and there is a famous manufacture carried on at Ferahoun' (Firaghān, which lies south-east of Hamadān).[49]

CARPETS OF WEST CENTRAL PERSIA

Firaghān must have been producing carpets from at least as early as the beginning of the 13th/19th century. An example in the Victoria and Albert Museum is dated 1232/1817. These carpets appear to have been especially popular among British Victorian households. Elegant, finely woven pieces, they have a variety of designs, while a special feature is their use of a particularly attractive soft green, with dark blue as a common ground colour. An excellent example, which probably dates from the mid-13th/19th century, is illustrated in pl. 41. The carpets of Firaghān are woven with asymmetrical knots, and two cotton wefts which are often blue. Warps are also cotton. Near by are other weaving areas famous from the middle of the 13th/19th century: Sārūq and its finely woven medallion carpets; Malāyir, often characterised by a particular rose-red; Sarāband known for its narrow runners with a design of tiny *būtehs*.

Hamadān appears to have had a long tradition as a carpet centre. Among the silk carpets presented to Selim II by Shāh Ṭahmāsp (see above) were some said to have been made in Hamadān and Deryazin (probably Dargizīn, a neighbouring village).[50] The Hamadān area is not now noted for fine carpets, weaving instead strong, hard-weaving runners tied with symmetrical knots and a single weft. A handsome 13th/19th-century carpet (pl. 37) has a medallion and poles which terminate in anchor-like heads with flowers and bird heads between. The ground is a rich, vivid red while the broad, undecorated outer border is camel-coloured. Large gelīms with a similar design were also woven in this region.

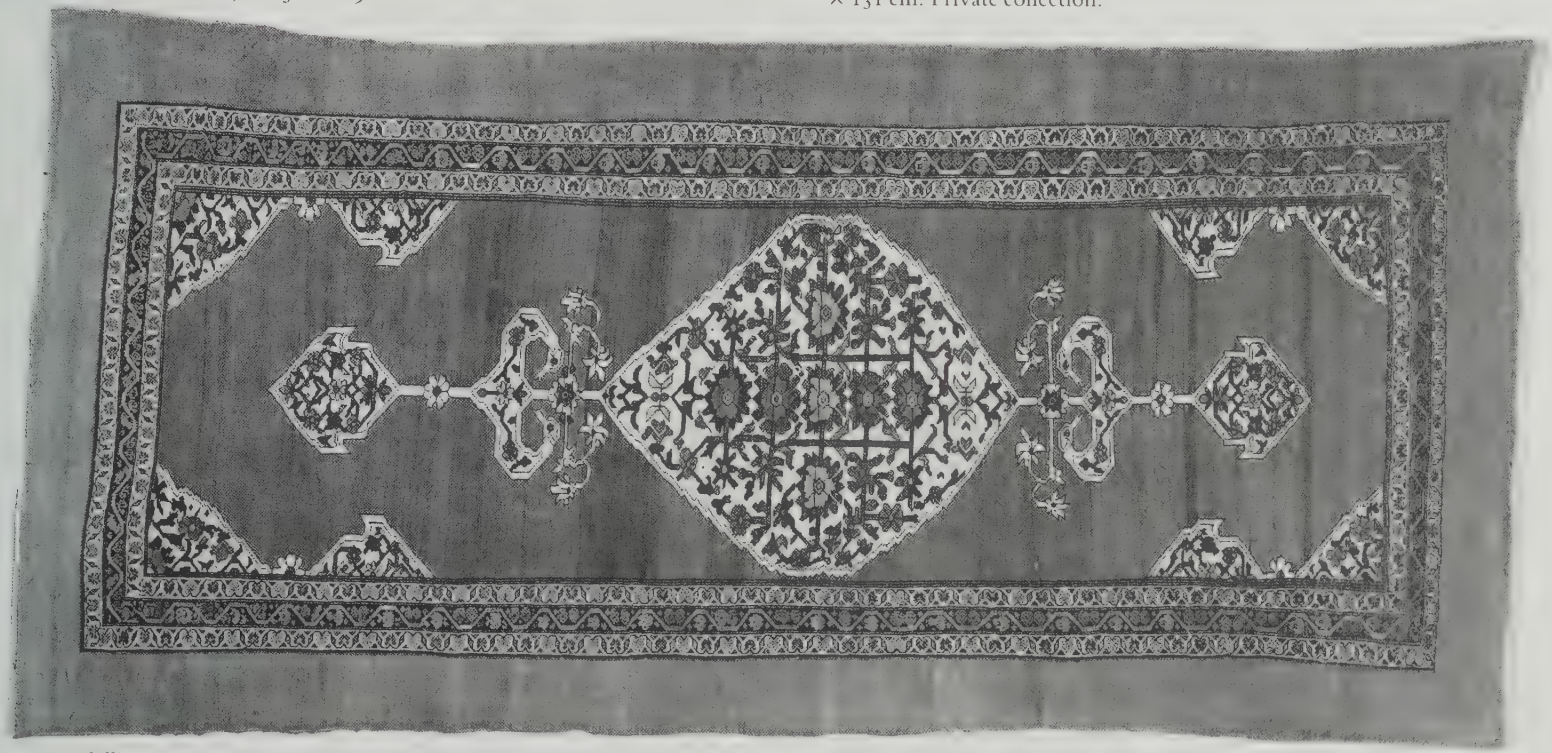
Further north, another important area is Hirīz, which has a weaving history that appears to extend at least as far back as the early 13th/19th century. A carpet with a lattice pattern believed to have been made there is dated to 1219/1805.[51] A magnificent example with a comparable layout though executed in a more curvilinear style (pl. 38) is also believed to date from the early 13th/19th century. Its pinks, ivory, soft blues and greens are admirably



35. Gelīm with medallion. Mid-13th/19th century, Sinneh region, west Persia. Wool warps and wool wefts. Slit tapestry weave, 187.5 × 136.25 cm. Victoria and Albert Museum, London, no. 321–1896.



36. Carpet with medallion. Early 13th/19th century, Sinneh region, west Persia. Cotton warps, one cotton weft, wool pile, asymmetrical knots. 202 × 131 cm. Private collection.



37. Medallion Carpet. Second half 13th/19th century. Hamadān region, west Persia. Cotton warps, one wool weft, wool pile, symmetrical knots. 371 × 181 cm. Victoria and Albert Museum, London, no. 363–1897.





38. (*preceding page*) Medallion carpet with floral design. First half 13th/19th century, Hirīz, north-west Persia. Cotton warps, cotton wefts, wool pile, symmetrical knots. 685 × 440 cm. Lefevre and Partners, London.

offset by the dark blue ground of the star-shaped medallion and the border. The square carpets with rectilinear medallion and corner designs that are associated with Hirīz today probably developed only at the end of the 13th/19th century.

The early Qājārs do not appear to have established carpet workshops at their capital at Tehran. The great urban centres such as Kāshān and Iṣfahān which are known to have flourished under the Safavids had apparently suffered a decline. Khurāsān remained an important centre and Kirmān too continued to weave carpets at a minor level, though it was occupied more in the weaving of shawls. It was only towards the end of the 13th/19th century when Western demand for Persian carpets had been stimulated far beyond their contemporary production capacity that carpet making at a massive urban level was revived. Weaving at Tabrīz, Tehran, Nā'īn, Iṣfahān, Qum, Kāshān, Kirmān and other towns famous for their carpets today formed part of this revival. It was brought about largely by European firms such as Zieglers of Manchester, who opened up several factories in Persia. Persian firms were not slow to follow.[52]

Yet this commercialisation of what had been a primarily domestic industry changed the nature of Persian carpets. Traditional vegetable dyes were replaced increasingly by chemical ones. These first appeared in Persia in the 1260–70s/1850s. The initial problems of fading or even of colours completely changing were eventually solved. But their very fastness also had a detrimental effect for, they do not mellow with age. One of the great charms of old Persian carpets is the lack of complete uniformity of colour. One batch of wool dyed with natural colours seldom exactly matches another so that a carpet with a plain ground often displays variations in tone – known as *abrash* – which much enhances its subtlety.

Lord Curzon condemned the change in the character of Persian carpets as early 1306/1889:

> Who that has once seen them can ever forget the imperishable colours, mellowed but uneffaced by time, the exquisite designs and the predominant grace of the genuine old Persian carpet? And who that has ever made a study does not experience a pang at sight of the modern usurper that so frequently claims to bear the honoured name?[53]

This is Curzon at his most dogmatic, and doubtless his opinion was based on the worst examples of an industry that was attempting to use European chemical dyes which were not yet properly made, and were certainly not properly understood by Persian dyers. There were, however, no subsequent major innovations and the modern commercial carpet remains one of the major Iranian exports. It remains a highly colourful floor covering, but can only be regarded as an imitation of what was once an important art form.

TRIBAL WEAVING

The weaving of the nomadic tribes of Persia is quite distinct from that of the settled towns and villages. It is the tradition of a people enduring hard lives often in remote regions, with an individual culture, who have poured into their everyday objects – floor coverings, bedding covers, horse blankets, storage and bedding bags – an instinctive wealth of colour and design that has descended through the ages without the aid of written instructions or drawings. Their designs are bold, abstract and highly colourful, with a power and vitality of their own.

In terms of sheer inventiveness, the richest repertoire is found among the tribes of Turkic origin, descendants of those waves of Ghuzz invaders that swept down from Central Asia from about the 5th/11th century onwards. The Saljūqs, whose empire at its height stretched from the eastern shores of the Mediterranean to the western borders of China were a branch of these original Turkic hordes, as indirectly were also the Ottoman Turks. The Saljūqs were followed by the Mongols who ruled Persia from about 617–782/1220–1380, from whom Tīmūr and his Timurid dynasty were descended (and also the Mughal emperors of India). In Persia they mingled with an already diverse population, whose country had been invaded numerous times and who had been culturally influenced by the Arab invasion. It is thus not surprising that certain motifs found in carpets were part of that vast cultural heritage.

Some of the patterns and motifs in tribal rugs are Safavid in origin, albeit that these are often in almost unrecognisable form. Others such as those found in the flat weaves of Luristān, may be derived from ancient Persian models. The Turks must doubtless have brought further motifs with them from their original home lands in the steppes of Central Asia. Unfortunately, nothing is known about the weaving traditions in their original homelands. They built no cities. Tent dwellers, they moved their goods with them and have apparently left nothing for archaeologists. But whatever the origins of the many decorative elements in tribal weaving, they were adapted and interpreted to be fused into compositions that are often of outstanding artistic merit.



39. Saddle Bag. 13th/19th or early 14th/20th century, Shāhsavan of Khamseh district, west Persia. Cotton warps, wool wefts, all-over weft wrapping. 140 × 55 cm. Collectioin of Michael Noel Clarke.

THE SHĀHSAVAN

In north-west Persia the inhabitants are almost entirely Turkic, and speak the Āzarbāījānī Turkic dialect. The largest of the nomadic tribal groups there is the Shāhsavan, a confederation whose name literally means 'Lovers of the Shāh'. They spend the winter in the Mūghān plain by the river Arras, migrating in summer to the high pastures of the Savalān mountain range west of Ardabīl. There are also several other Turkic groups in north-west Persia, sharing ethnic and cultural links with the peoples of the Caucasus from whom they are now divided by a political (but not ethnic) boundary. Formerly, tribes migrated deep into what are now Soviet territories, and it is often impossible to establish a clear division between weaving of the southern Caucasus and that of north-west Iran.

The flat weaves of this area are particularly interesting, especially those that are brocaded in a weft wrapping technique sometimes known as Soumak. Pl. 42 illustrates a striking example with a plain weave field of red and green, upon which are brocaded processions of stylised horned animals, others with two heads, stylised bird forms, even a human figure, as well as rosettes and small S scrolls. Quite distinct from any urban or village rug, this is a powerful expression of the art of a nomad peoples which would have been used as an all purpose cover or as a decorative horse blanket. It was very probably woven by the Shāhsavan.

By the early 13th/19th century groups of Shāhsavan had been moved to several other places which lie roughly south of a line drawn between Tabrīz and Tehran. Some attractive bags can be attributed to one of these groups, the Amīr Afshār Shāhsavan who, as their name implies, are probably an amalgam of Shāhsavan and a tribe of Afshār origin. The Afshār were at one time among the most powerful of the tribes of north-west Persia, later to be scattered all over the country by successive monarchs. Some of these saddle bags (see pl. 41) finely brocaded in all-over weft wrapping, have in the centre curious, rather heraldic-like devices.

40 Rug with medallions and stylized animals. 13th/19th century, probably Qashqā'ī, south Persia. Wool warps, two wool wefts, wool pile, symmetrical knots. 208 × 154 cm. Lefevre and partners. London.



THE QASHQĀʿĪ AND OTHER TRIBES OF SOUTHERN PERSIA

Among tribal knotted pile rugs justifiably the most famous are those of the Qashqā'ī confederation of Fārs in southern Persia (pls. 40 and 43). Many Turkic motifs are discernible for the Qashqā'ī probably share a common origin with Turkic tribes such as the Shāhsavan in north-west Persia from where it is thought they were perhaps moved in the 10th/16th century by Shāh Ismāʿīl in order to help defend his southern shores.[54] The rug in pl. 40 illustrates many of the typical Qashqā'ī motifs which are combined with an unerring sense of colour. Persian *būtehs* were also taken up with great enthusiasm by the Qashqā'ī. In pl. 43 several small ones within a larger one gives rise to the term 'Mother and Child *būtehs*'. Surrounded by beskirted figures and other stylised forms, they have been interpreted in a thoroughly tribal manner in which by comparison the more conventional composition of the late 12th/18th century carpet in pl. 30 appears much less inventive.

Most Qashqā'ī rugs have a woollen foundation with two wefts, usually red, and symmetrical or sometimes asymmetical knots. Side finishes consist of a single cord of warps overcast in various colours, while the ends are often extra-weft brocaded with herringbone or chequered stripes. These structural characteristics prevail among most tribal rugs of Fārs,

41. Carpet with lattice design and rosettes. Mid 13th/19th century, Firaghān, west Persia. Cotton warps, two cotton wefts, wool pile, asymmetrical knots. 394 × 206 cm. Lefevre and Partners, London.



42. Flat woven rug with stylized animals. 13th/19th century, Shāhsavan north-west Persia. Wool warps, wool wefts, Plain weave ground with pattern in weft wrapping. 229 × 218 cm. Lefevre and Partners, London.



43. (and detail facing page) Rug with design of 'Mother and Child' *būtehs*. 13th/19th century, probably Qashqā'ī, south Persia. Wool warps, two wool wefts, wool pile. 338 × 160 cm. Lefevre and Partners, London.





44. Gelīm with Medallions and Hooked Lozenges. 13th/19th century, Lurī or Qashqā'ī, south Persia. Wool warps, wool weft, extra weft brocaded skirts. Slit tapestry weave. 284 × 165 cm. Lefevre and partners, London.



45. Rug with design of stylized floral motifs. 13th/19th century, Tribes of Kirmān area, south Persia. Wool warps. Wool wefts, wool pile, symmetrical knots. Double interlocked tapestry weave. 201 × 172 cm. Lefevre and Partners, London.

however, and are not confined only to the Qashqā'ī. Intermarriage and changes of allegiance between neighbouring tribes – particularly the Khamseh, whose weaving is little known – as well as increasing numbers of nomadic peoples becoming settled in villages, have inevitably resulted in a wide interchange of designs. Attributions to specific tribal groups of southern Persia should therefore seldom be considered definitive. The gelīm in pl. 44 may have been woven by the Lurs of Fārs, or by the Qashqā'ī.

THE KIRMĀN REGION

Further east in the province of Kirmān are several other Turkic tribes. The largest of these is the Afshār, an offshoot of those described above who became linked with a Shāhsavan group in north-west Persia. Some appear to have been moved south in the 10th/16th century, others probably later, in the 12th/18th century, when Nādir Shāh, himself an Afshār, scattered his kinsmen to all corners of the country, and effectively reduced their power. Afshār tends to be used as a generic term for all the woven products of the area, irrespective of the fact that several other tribes such as the Buchāqchī and the Qutlū must certainly have made some of them. Specific attributions to the various groups have not yet been seriously attempted. Many of the motifs found in such rugs are part of the rich Turkic repertoire, but others find their origins in the urban tradition of Kirmān, derived both from

the classical vase-technique carpets of the Safavid period and also from the patterns of shawls for which Kirmān was renowned in the 13th/19th century. *Būtehs* were particularly popular, and appear in rugs, flat weaves and in bags. The rug illustrated in pl. 45 has rows of offset, stylised flowering trees in a lattice of branches, and perhaps finds its prototype in 12th/18th-century carpets such as the fragment illustrated in pl. 14. The outer guard stripes are similarly derived from classical types though the inner one, with its S forms and stars, is typically Turkic.

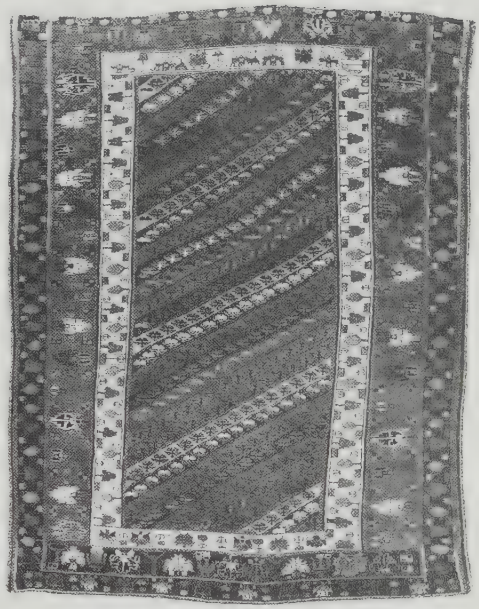
THE TÜRKMEN

Another Turkic tribe of major importance is the Türkmen. Several groups are to be found in the north-east, where they are separated from the bulk of their kinsmen in Central Asian Turkistān by the frontier between Iran and the Soviet Union. Their cultural associations are with Central Asia rather than with Iran, and as such, they lie beyond the immediate scope of this chapter. One rug, however, is illustrated, to show the rich-red field and characteristic design of 'guls' (perhaps derived from the Persian for flower) (pl. 47). This rug was woven by the Saryk group. At one time each sub-tribe is thought to have had its own distinctive 'gul', but changes of allegiance and the absorption of smaller groups by more powerful ones has resulted in a dispersal of motifs. Once again, structural peculiarities and colour are often more helpful than design in attribution.

THE KURDS

The Kurds are the largest and most important of the indigenous tribes of Persia and are thought to be among the oldest inhabitants of the Iranian Plateau. They exist particularly in the north-west of the country, but also in north-eastern Iraq, eastern Turkey, the Soviet Union and even Syria. Large numbers have been dispersed into many other areas, including those established in Khurāsān in the early 10th/16th century.[55]

Many Kurds, especially those around the provincial capital of Sanandaj have long led a settled existence, and their rugs are therefore part of an urban and village tradition. The designs of such rugs were doubtless shared with their nomadic kin, and hard and fast distinctions between the two are inevitably blurred. Baron von Thielman, who travelled in 1288/1872 from Tabrīz to Mosul in northern Iraq through the famous Kurdish town of Sāüj Bulāgh (now renamed Mahābād) commented on the trappings of the horses he had hired which 'were covered with rich tassels, tufts, and some ornaments of a carpetlike material, which, as regards design and combination of colours, recalled to mind the finest Kurdish carpets, known to be the best in Persia.'[56] The rug in pl. 46 is characteristic of the pile rugs and bags of the Sanjābī Kurds, who migrated from the warm Mesopotamian plains to summer pastures in the mountains of northern Iraq and western Persia. Such pieces were once marketed in the Iraqi town of Mosul, and are sometimes known by that name. Woven with symmetrical knots on a woollen foundation, they are shaggy and coarse but very attractive.



46. Rug with design of diagonal stripes and stylized trees. 13th/19th century, Kurdish, west Persia. Wool warps, wool wefts, wool pile, symetrical knots. 218 × 165 cm. Lefevre and Partners, London.

THE LURS

The Lurs are also an ancient people and, like the Kurds, speak a language that is Persian in origin. There are four main groups: the Lurs of Luristān, a region that adjoins Kurdistān to the south; the Bakhtiyārī who winter on the plains of Khūzistān on the Persian Gulf with their summer pastures in the mountains west of Iṣfahān; and the Kūh Gilū'ī and Mamasānī Lurs, in south-east Fārs. The weaving of this last named group appears to have links with that of the Qashqā'ī (see pl. 44). The other Lurs and the Bakhtiyārī have a highly individualistic repertoire of designs which probably derives from an ancient culture and was perhaps passed down from the the famous Luristān bronzes. Bold and uncompromising, their gelims are woven in the double interlocked tapestry technique. A particularly interesting example is the horse blanket in pl. 48, which has characteristic rusty-reds and dark blues as well as the more unusual green. Swastikas, an ancient symbol of good luck often found in this area, decorate the lower border. Equally distinctive are the saddle bags, brocaded in the weft wrapping technique, the base of each side reinforced with pile.

The Bakhtiyārī appear to have remained relatively undisturbed, but other Lurī groups have been moved, particularly to the area around Varāmīn, south-east of Tehran. The bag illustrated in pl. 49 was woven by the Lurs in this area. Varāmīn Lurī bags are somewhat

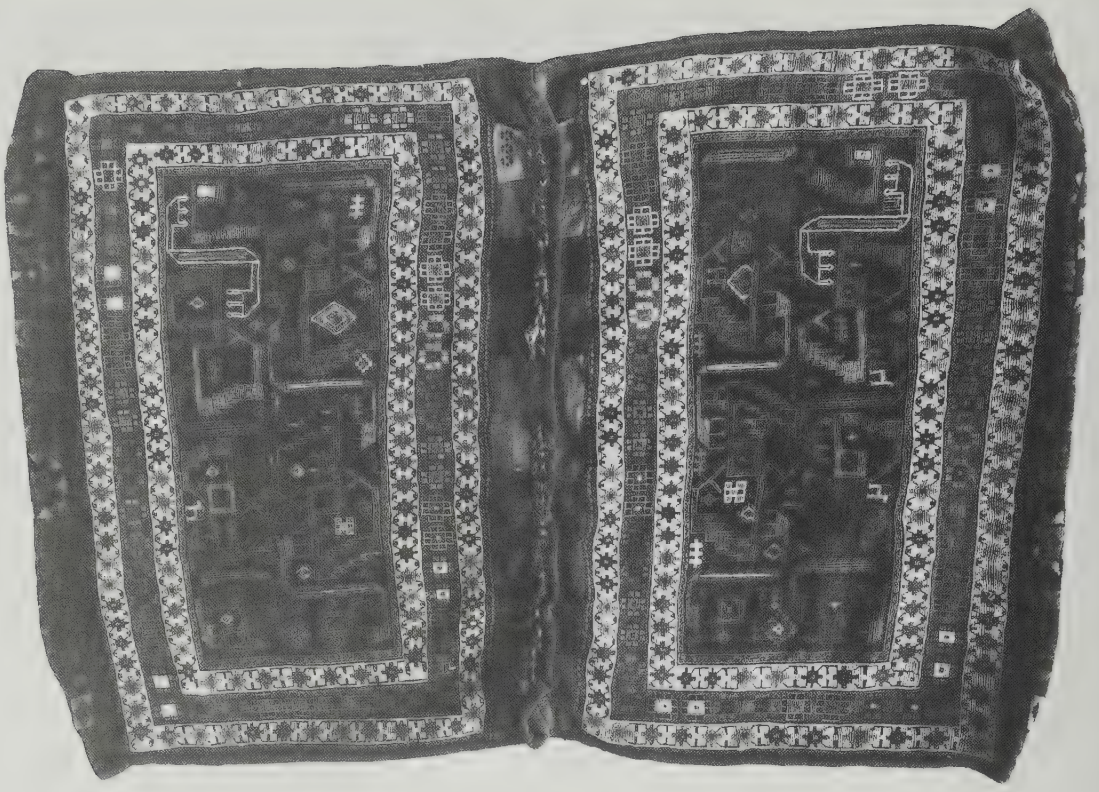


47. Rug with design of 'Guls'. 13th/19th century, Saryk, Türkmen, Central Asia. Wool warps, wool wefts, wool pile, symmetrical knots. 246 × 213 cm. Lefevre and Partners Lts, London.



48. Horse Blanket. 13th/19th century. Luri or Bakhtiyārī, Central Persia. Wool warps, wool wefts. 130 × 150 cm. Collection of Amedeo de Franchis.

49. Saddle bag. 13th/19th or early 14th/20th century, Lurs of Varāmīn, north Persia. Wool warps, wool weft woven in all over weft wrapping. 143 × 96 cm. Private collection.



50. Rug with zig-zag design. Late 13th/19th century, Balūch, north-west Persia. Wool warps, wool wefts, wool pile, asymmetrical knots. 188 × 109 cm. Lefevre and Partners Ltd, London.



different from those of Luristān, tending towards brighter colours and less crowded designs. This example has a particularly unusual field, in which the stylised forms are perhaps dragons and phoenix in combat, a motif popular among Safavid designers, and used in a more conventional form in the so-called Sanguszko carpets (pl. 12).

As well as the Lurs, peoples from several other tribes, including Kurds, Arabs, Shāhsavan, Qashqā'ī, and Türkmen, have intermingled in the Varāmīn area. Centrally placed in the kingdom, Persian monarchs perhaps regarded it as an ideal spot to establish groups of unruly tribes-people in an effort to reduce their power elsewhere. Other interesting tribal pieces have emerged here and it is hardly surprising in view of the many tribal elements that they are often singularly hard to identify.

THE BALŪCH

In the east are the Balūch, another ancient people whose more chauvinistic members claim descent from Nebuchadnezzar. Their origins are obscure, but by the 4th/10th century they appear to have been established in the mountains of the Kirmān province, and were perhaps pushed eastwards into the arid region of Balūchistān by the Turkic invasions of the 5th and 6th/11th and 12th centuries. From there large numbers moved north into the more fertile province of Khurāsān, where most of their more interesting weaving has been done. With the limited palette of varying shades of reds and blues and sometimes camel, their rugs are quite unmistakable. The repertoire of designs is extensive, and includes familiar motifs from many other parts of Persia. The interpretation of these is characteristically Balūchī, however. A typical example in pl. 50 has a field design of hooked zig-zag bands and geometrical motifs, perhaps stylized trees. Prayer rugs, with the usual Muslim *miḥrāb* shape, often have a camel coloured ground, and some make use of a brilliant yellow. Balūchī rugs are usually small, and tied with asymmetrical knots. Three or four cables often overcast in goats hair form the side finishes, while decorative skirts are sometimes found at top and bottom with extra-weft brocaded designs. Flat woven rugs with extra-weft brocading or wrapping usually have broad horizontal bands containing motifs unknown elsewhere that are perhaps part of a purely Balūchī tradition.

Dating tribal rugs is not easy. Few are inscribed, and designs have probably remained little changed for generations. Most were certainly subjected to hard use and it is doubtful if many early examples have survived. Most of those illustrated here were probably woven during the 13th/19th century. Chemical dyes were widely adopted in the later years of the 13th/19th century, and the commercialisation that changed the nature of the urban and village carpets also had an impact on those of the tribes. Traditional values have prevailed for longer among peoples living in remote areas, but an inevitable stereotyping of designs has long been evident, and modern examples of tribal weaving are often characterised by garish colours. Nevertheless, in tribal lands and villages the personal sense of craftmanship remains strong and the contribution of weaving to family income is important.



9 TEXTILES

PRE-ISLAMIC: ACHAEMENIAN, PARTHIAN AND SASANIAN

THROUGHOUT ITS HISTORY Persia has made superb textiles and the high value placed upon them, inherited by Islam from the ancient world, seems inconceivable to Europeans today. Textiles were necessary to tribe and court not only as dwellings, furnishing and clothes but as the outward display of wealth and status. Precious textiles were common trade-goods, since they were easily transported and commanded high prices, and their designs influenced other media. Attention has rightly focused on Safavid production but the influence of Sasanian silks was even greater, dominating the pattern iconography of early medieval Islam and Christian Europe.

Elements of continuity evident in other arts also appear in Persia's textile history. One is the love of brilliant colour, endemic until Rizā Shāh's sumptuary laws and now surviving only among the tribes. Europeans, beguiled by softly-faded old textiles, forget that Persians have always preferred strong colours.

Villains of the ancient classical world, one of the Persians' iniquities was their luxurious lifestyle, even among the military. Moreover, they wore trousers, the outward manifestation of barbarity to skirted Greeks and Romans. Xenophon describes Cyrus in his chariot wearing 'a purple tunic shot with white . . . and trousers of scarlet dye about his legs, and a mantle all of purple'.[1] Xerxes' infantry crossing the Hellespont presaged Hollywood, with each tributary nation in its own battle dress: Sacae (Scythians) in pointed hats and trousers, Indians in cotton and Arabians in long, belted robes, Ethiopians in leopard and lion skins and horse-head helmets, their bodies brightly painted and, above all, the Persians themselves in embroidered tunics and trousers under coats-of-mail, Median dress according to Herodotus, who adds that 'every man glittered with the gold he carried about his person in unlimited quantities'.[2] Later Persian armies bore silk into battle. The Parthian cavalry which defeated Crassus' Roman army at Carrhae in 53 BC carried silk banners, and the silk-clad troops of Shāpūr II (AD 309/79) appeared to Ammianus Marcellinus as 'brilliant, multicoloured and fluttering in the wind'.[3]

Something of Achaemenian splendour appears at Persepolis, where King Darius I (522/486 BC) and Persian officials wear long robes, said to be of Elamite origin, while the Medes preserve the horseman's garb of their nomadic past: short tunic and bulky trousers, soft boots and domed hat, possibly of felt (see Chapter 3, pl. 17). This sculptured clothing is undecorated, but the Immortals on coloured tile panels from Darius' palace at Susa wear robes with lozenges, discs and rosettes, perhaps of metal plaques or embroidery and hinted at by Achaemenid tablets, also from Susa, which mention weaving industries and clothes with coloured embroidery.

The origin of the famous carpet from Pazyryk of the 5th to 4th centuries BC is still debated, but these barrow-burials of tribesmen with esoteric tastes also yielded wool tapestry fragments, sewn to a horse's chest-strap, which may be Persian (pl. 1). One has a row of maned lions with gaping jaws and curling tails,[5] familiar from Achaemenian seals and architectural ornament, for instance, on a carved door canopy in the Hall of the Hundred Columns at Persepolis.[6]

Coats trimmed with silks patterned with animals in roundels, excavated from Graeco-Roman graves at Antinoë, Egypt, in 1897, were first identified as Sasanian by J. Strzygowski. Other fragments came from European churches and Central Asian burials. None have been found in Persia.

This 'riding-coat'[7] was also worn by Parthians and is seen on statues from Hatra. One figure, possibly of Sanatruq II, the city's ruler in the 1st or 2nd century AD, wears a sleeved, belted tunic and baggy trousers decorated with bands of pearl discs and lozenges, possibly of embroidery or metal plaques (pl. 2). Sasanian kings wear the same dress on their rock reliefs, unpatterned and worn with sheepskin over-trousers resembling cowboy 'chaps'.[8]

Detail from *Pilgrim Caravan to Mecca*, see pl. 10.



1. *Procession of lions*, part of a horse's chest-strap, 5th to 4th centuries BC. Wool tapestry, 7 × 80 cm. From Barrow 5, Pazyryk. Hermitage Museum, Leningrad.



2. *Sanatruq, Parthian Lord of Hatra*, 1st to 2nd century AD. Limestone statue. H:2.20 m. Baghdad Museum.

The shadowy Parthian dynasty (211 BC–AD 224) prefigured a good deal previously associated with their successors, the Sasanians (AD 224–642). Each dynasty perpetuated Achaemenian culture and the Parthians handed on the themes of hunting, war and banqueting. The Parthians were middlemen in the lucrative Chinese silk trade with the West, and wars against Rome and Byzantium under both dynasties were concerned with control of east-west trade routes. From trading in raw and woven silk, inevitably Persia produced her own silk goods, though this appears to be a late development.

The secret of sericulture, long kept by the Chinese, reached Persia by the 2nd and 3rd centuries AD. The drawloom apparatus, which provided a major impetus for silk-weaving, may have developed in the Levant and the Arab accounts of captive Syrian weavers settled in Khūzistān are therefore significant. These are considered suspect by some scholars, but there is also an inscription of Shāpūr I (AD 241–72) at Naqsh-i Rustam stating that his 'Roman' prisoners included many technicians whom he settled in his new cities of Gundeshāpūr and Bīshāpūr.[9]



3. *Senmurv*, from the relics of St Leu, 1st–2nd/7th–8th centuries. Plain compound silk twill, one repeat. 35.5 × 51 cm. Victoria and Albert Museum, London. 8579.1863.

The earliest evidence of patterned textiles is, however, the much later Tāq-i Bustān reliefs of Khusrau II (AD 591/628), by which time drawloom weaves, chiefly compound weft-faced tabby and twills with large repeats, were known throughout the Near East. The king appears armed on his warhorse, Shabdaz, and in the *Boar* and *Deer Hunt* reliefs, accompanied by courtiers and musicians. Only he wears clothing embellished with the *senmurv*, isolated and in roundels (see Chapter 5, pl. 29). This creature with a bird's head, wings and tail and lion's claws, wearing a collar, is prefigured in a Parthian relief at Qal'eh-i Yazdigird.[10]

The upstart Sasanians restored Zoroastrianism and in Avestan texts the *senmurv* roosts on the Tree of Seeds, brings rain and has healing powers.[11] Pl. 3 shows a *senmurv* from the church of St Leu, now in London and Paris.[12] The London *senmurv* faces right (pl. 3), the Paris creature left. A larger cloth, the Shroud of St Remi, now in Rheims, shows *senmurv* alternately confronted and addorsed.[13] These silks are now thought to have been woven in Iran or Transoxiana between the 1st and 3rd/7th and 9th centuries. A recently discovered garment from a tribal grave at Mochtchevaya Balka in the North Caucasus has five large repeats over a conjectural 80 centimetre width – a fully-developed drawloom fabric.[14]

The pearl roundel-frame derives immediately from Parthian stucco portrait-busts. The circle is a powerful symbol: the Sasanian royal diadem was circular and many kings wore pearl collars and pearl diadems round their crowns, it emphasises the importance of the enclosed motif and in weaving is a convenient shape for repeats. A suggestion that the Sasanian pearl roundel derives from Han China is not persuasive,[15] since it occurs early in the Near East, from clothing on Assyrian reliefs to Seleucid coins edged with small discs. In the London silk the motifs in the small, linking roundels, barely noticed, form a crescent similar to that of the moon-goddess on Khusrau I's crown (AD 531–79).[16] A servant in the *Boar Hunt* wears this crescent. The Paris silk, with the same crescent at each side, has a double crescent at top and bottom. These motifs cannot have been used by chance, and serve to align the silks more closely to Sasanian royalty, suggesting Persian manufacture. The later 'caftan' has four-lobed rosettes in its linking roundels, common in early Islamic textiles from Transoxiana, where no doubt the sacred crescent was abandoned.

Sasanian kings promoted a semi-divine royal image, *xwarran*, and in addition to the *senmurv* other creatures from Avestan texts are linked to this concept and are shown with the collars and the fluttering ribbons worn by the kings themselves. A splendid polychrome silk in Rome has rows of cocks with pearl collars and nimbuses, standing on plinths which are reminiscent of metalwork, and enclosed in roundels decorated with hearts.[17] A courtier in a boat at the *Boar Hunt* wears clothing with cocks, ducks and palmettes (see chapter 5, pl. 00). In *Bundahish* texts the cock helps to protect mortals at night and, by implication, to enter into Paradise.[18] Other textiles show ducks and water birds. Two of the Antinoë silks show, respectively, a standing horse and a ram (pl. 4), both adorned with collar and ribbons.[19] These animals are missing at Tāq-i Bustān but the horse appears often in other media, notably silver, which like textiles was probably a royal monopoly. In the *Avesta* horse, ram and boar are forms of the god Verethragna, engaged in the conflict between Good and Evil. The boar 'that kills with a single stroke', the object of veneration and of sacrifice in the hunt, was the god Mithra's avenger who punished liars. The extant boar textiles are probably of Soghdian weaving of the 1st/7th century onward. The large fragment discovered by Sir Aurel Stein in the Astana cemetry, on the Silk Route, had been used as a face-cover for the dead (pl. 5).[20] Others have been excavated recently by Chinese archaeologists, one of them dated 41/661. All these creatures were copied in 'down-market' wool tapestry in Egypt and the Eastern caliphate from the 1st/7th century. A ram with a cross between its horns was probably woven by Iranian or Mesopotamian Christians (pl. 6).

Patterns with hunters and warriors, single and in pairs, appealed to the rulers of early Islam and medieval Europe, who engaged in the same activities. In *The Royal Hunter*, Harper rightly states that neither human figures nor paired motifs in roundels appear at Tāq-i Bustān,[21] which she uses as the only evidence for Sasanian patterned textiles. However, the *senmurv* on the king's coat are paired on either side of the central fastening. Investitures on the royal reliefs show god and king on either side of a central axis formed by the diadem, even their horses paired nose-to-nose. Similar compositions occur in Sasanian stucco and metal: they are of course much older legacies from ancient Mesopotamia, via the Achaemenians and Parthians. It is unfortunate that Tāq-i Bustān pictures the fashions of one reign, and what may be court livery, and that late Sasanian secular buildings are ruined. But the mid-dynasty palaces of Kish, Dāmghān and Ctesiphon preserved frescos with hunting scenes which were also described by Ammianus Marcellinus (AD 363) who thought that hunting and slaying wild beasts was a Persian obsession. It would be strange if such potent symbols were neglected in textiles.

The Sasanian heritage, a concept of kingship and its iconography, penetrated throughout



4. *Ram from Antinoë*. 1st–2nd/7th–8th centuries. Plain compound silk twill, one repeat. Musée Historique des Tissus, Lyon.



5. *Boar's head*, from Astana. Transoxiana, 1st–2nd/7th–8th centuries. Plain compound silk twill. 19 × 20 cm. National Museum, New Delhi.



6. *Ram with a cross between its horns*. Iran or Iraq, 1st–2nd/7th–8th centuries. Wool tapestry version of a silk design. 25 × 19 cm. Whitworth Art Gallery, University of Manchester, 8875.

Islam and into Christian Europe, and eastward to China and Japan, its patterns surviving for five hundred years after the dynasty fell to Arab conquerors.

EARLY ISLAMIC: BUYID AND SALJŪQ

Early Islamic cloth manufacture and trade are well documented by Arab authors,[22] though weaves are difficult to identify. The Arabs annexed existing state factories, notably in the Byzantine and Sasanian empires. Annual tribute to the caliphs included local cloth or garments and in some cases the offering was that made to Sasanian kings. Geographical and socio-political factors like water supply and proximity to trade routes dictated the establishment and survival of textile centres. Craftsmen are easier to move. Sasanian manufactories at Sūs, Annadjam, Rayy and Marv, the latter in the Sasanian sphere of influence, simply worked for new masters. Nor were some of their textiles greatly changed, for *Rūmī* (Roman, e.g. Byzantine) and *Khusravānī* silks (probably in the style of the old Persian kings) were in demand. Tustar was renowned for its *Rūmī* brocades. Fasā, in Fārs, wove curtain fabric of silk and wool with circles and borders expressly for the ruler.[23] The Shīʿī Fatimids favoured these textiles: Caliph al-Mustanṣir (427–87/1035–94) owned prodigious quantities, including great tents 'worked with birds, elephants and all kinds of pictures' and twenty thousand pieces of Khusravānī stuff, unused.[24]

An early example is of wool tapestry with roundels enclosing cocks and eagles on plinths (pl. 8) and, at the top, an inscription: '. . . (Commander of the) Faithful Ma(rwān). This has been ordered . . .' This is thought to refer to Marwān II (127–32/744–9), the last Umayyad caliph, and on technical grounds it was probably woven in Persia or Mesopotamia.[25]

From existing industries the *ṭirāz* system developed. Inscriptions became a feature of textile design under the Umayyads and embroidered inscribed bands were called *ṭirāz* (Arabic, *ṭarz*), meaning embroidery, the early technique used to work these non-repeating inscriptions. Later woven versions were also named *ṭirāz* and ultimately the textiles and the workshops where they were made were given this name. Two types developed. The royal or private *ṭirāz al-khāssa*, producing fabrics for the court and sometimes situated in the palace, was tightly controlled. The intendant of royal factories was frequently the vizier or a member of the royal family. The public *ṭirāz al-ʿāmma* catered for the wealthy. Most surviving pieces have been found at Fusṭāṭ and the largest number were made in Egypt, but some came from the Eastern caliphate and are identifiable by their ground of cotton or *mulḥam* and chain-stitch embroidery. Beginning with the *Basmālā*, followed by the ruler's given name, titles and the date, an inscription may name the factory of origin and the intendant or vizier's names. Pl. 7 illustrates a piece from the Bīshāpūr private *ṭirāz* of undyed cotton embroidered with dark brown silk. An Eastern Abbasid kufi inscription reads: 'In the name of God, the Merciful, the Compassionate. Praise to God, Lord of the Worlds . . . from God and happiness to the Servant of God Jaʿfar, the Imām al-Muqtadir billāh, Commander of the Faithful, may God prolong his existence. What has been ordered to be made in the factory at Bīshāpūr, year 298'.[26] Others were made in Marv. They played a propaganda role comparable to coinage but their importance declined with the power of the ʿAbbasids. Later bands were tapestry-woven and many were no doubt made in the public factories: these rarely bear names except, perhaps for that of the ruler, and they have been little studied.

How were they used? The honour of providing the *Kiswa* or inscribed Kaʿba cover was jealously coveted, since this act of piety was manifest to all.[27] By the 4th to 5th/10th to 11th centuries distinctive Islamic dress had developed and manuscripts show the turban and sleeves, and sometimes the neck and sleeves, with inscribed bands, conventionally delineated in gold. In the *Pilgrim Caravan* master, servants, pilgrim banners and animal trappings are thus decorated (pl. 10).[28] Some surviving pieces were possibly women's veils and shawls.

Although silk was the most important fibre, supported by sericulture particularly in the northern provinces of Āzarbāījān, Ṭabaristān and Khurāsān, mundane but valued fabrics were made in *ṭirāz* workshops, and districts had their own specialities. Khūzistān, with eighty *ṭirāz* by 301/913–14 and markets at Sūs and Ahvāz, exported cotton turban-cloths as well as silks. Kāzirūn in Fārs marketed local silks, cotton robes and head-cloths, linen and goat-hair cloth, carpets and gelīms. Industries flourished particularly in the north-east. In Khurāsān, Nīshāpūr and Marv produced the best cotton and *mulḥam*, Marv being noted for black cloth (the ʿAbbasid colour) and inscribed silk turbans. In Transoxiana the Soghdians traded with the Chinese and wove Sasanian-style silks, Bukhārā under the Samanids became a world market for silks, muslins and quilted cotton robes, *zandapīchī*, from its hinterland. The *ṭirāz* system survived until the Mongol invasions in the 7th/13th century destroyed



7. Fragment with inscription, made in the Bīshāpūr tirāz, 298/910–11. Silk chain-stitch embroidery on cotton, 20 × 43.25 cm., letters: H: 0.21 cm. Textile Museum, Washington D.C., 73.674.

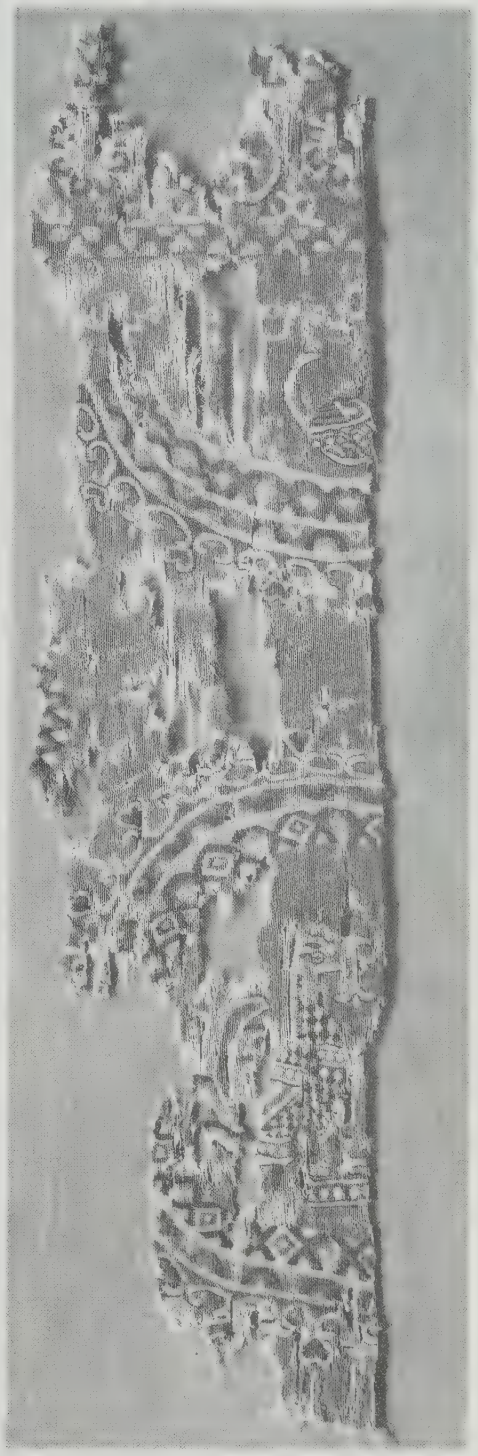
cities and their industries. State manufactories were re-established by the Timurids and Safavids.

Finds of early Islamic silks in European churches testify to highly-organised trade and kingly gifts, doubly welcome until European silk-weaving developed in the 8th/14th century. The 'shroud of St Josse', found in this saint's reliquary at St-Josse-sur-Mer, is believed to have been brought to France after the First Crusade by Étienne de Blois, the Abbey's patron.[29] A thick silk twill, it is unusual in its carpet composition (pl. 11). Its two rows of elephants are power symbols, the cock in each corner is Sasanian-inspired, and the Bactrian camels roped nose-to-tail in the border would place it in the Eastern caliphate. This is supported by the inscription:

Glory and prosperity to Qāʿid Abū Manṣūr Bakh-takīn, may God prolong his existence.[13]

The Turkish commander in Khurāsān who is named here was executed by his Samanid ruler, ʿAbd al-Malik b. Nūh in 350/961.

Soghdian silk industries flourished into the 3rd/9th century and frescos excavated at Soghdian sites demonstrate the continuing popularity of Sasanian-style designs. One, from Afrāsiyāb, old Samarqand, shows three men whose long garments are patterned with boars, cocks and *senmurv* in roundels.[30] Soghdian textiles were first identified by one which has an inscription referring to Zandanījī, a village near Bukhārā. The piece illustrated in pl. 9 with pairs of lions, power-symbols, and palm trees in roundels, with foxes and hounds



8. *Cocks in roundels*, with inscription possibly of Caliph Marwān II, Iran or Iraq, 127–32/744–9. Wool tapestry. 50 × 11.8 cm. Textile Museum Washington D.C.73.524.



9. *Paired lions in roundels*, from Verdun Cathedral. Soghdian (Zandaniji group) 2nd to 3rd/8th to 9th centuries. Plain compound silk twill. 62 × 46 cm. Victoria and Albert Museum, 763.1893.



10. *Pilgrim Caravan to Mecca*, from Ḥarīrī's *Maqāmāt*, signed and dated *al-Wāsiṭī*, Baghdad, 635/1237. Bibliothèque Nationale, Paris, MS.ar.5847.f.94v.



11. The '*Shroud of St Josse*', from the Church of St Josse-sur-Mer, Pas de Calais. Khurāsān, 4th/10th century. Plain compound silk twill. Two pieces: 52 × 94 cm. and 24.5 × 62 cm. Musée du Louvre, Paris, 7502.



12. *Double-headed eagles*, (detail) possibly from Rayy. Buyid, early 5th/11th century. Inscription, top: *You remain the Amīr of the Faithful and your preservation is for the epoch a great event*, (from a verse by Buhturī to Caliph al-Mutawakkil, 232–47/847–61). Silk lampas, 170 × 65 cm. Cleveland Museum of Art 62.264.

13. *Hawking scene*, (detail) one of the controversial textiles, possibly from Rayy, Buyid, 5th/11th century. Plain compound silk twill, 36 × 27 cm. Abegg-Stiftung, Bern.



in the spandrels, is typical. So is the simplistic, angular 'drawing', dictated partially by the twill technique. This silk may come from a Christian reliquary; many others have been found in tribal burials and on sites along the Silk Route.[31] Thus, the textiles of conquered Persia preserved a national identity, to be passed on to future generations, and profoundly influenced those of other Islamic nations.

Another scholarly sensation was provided by unknown figured silks which appeared in the West in the late 1920s and, sixty years later, are still controversial. Undercover excavations in 1925 of medieval tombs at Rayy revealed human remains, wood coffins and textiles.[32] Fine silks, presumably from this source, later reached the Western art market (pl. 12). They were principally garments, shrouds and large cloths with funerary inscriptions, the latter used as coffin covers according to Daylamite Shī'ī practice.[33] The tombs' occupants are unknown, but inscriptions, one of which bore the name of the Buyid ruler Bahā' al-Daula (379–403/989–1012) encouraged scholars to classify some silks as Buyid. In all, they date from the late 'Abbasid to late Saljūq periods and include Egyptian and Syrian fabrics. However, the unscientific nature of the excavations led some to believe that they were modern forgeries. In the 1970s, tests on fibres, dyes and weave-structure of thirty-nine silks at the Abegg-Stiftung Bern, concluded that thirty-one were suspect (pl. 13).[34] A report from Cleveland Museum of Art, which owns fragments of the same silks, disputed these findings.[35] Clearly, controlled scientific tests of a larger number of textiles, using recently-refined methods, are desirable. It is perfectly possible that some may be modern but the invention of a new, complex iconography, epigraphically correct, the emulation of medieval fibres, dyes and weaves, for which modern technology could help little, and the simulation of fabric fatigue would demand skills and organisation of no mean order.

The Buyids (*c.*320–447/932–1055), a Zaydī Shī'ī family from Daylam, claimed Sasanian descent and identified with pre-Islamic Persia. In Baghdad, 'Aḍud al-Daula (335–8/946–9) seized the royal *ṭirāz* of the declining 'Abbasid caliphate for his own use. The Buyid areas in Persia were already textile centres. Ṭabaristān was the greatest sericulture province in all Islam, and the Buyids encouraged silk and cloth production. 'Aḍud al-Daula even founded a new town, Kurd Fannākhusrau, in Fārs, and settled weavers there.[36] Rayy had ceramic and textile industries,[37] its speciality being *munayyar*, a thick cloth, sometimes striped. But Rayy's importance lay, apparently, not in its own textiles but in its market, reported by Arab authors as the largest in the Buyid dominions, trading in the *khazz*-silk of Sūs, Fārs robes, Iṣfahānī cloaks, the *ḥaffī* of Nīshāpūr and the *mulḥam* of Marv. Baghdad *siklatun*, *Rūmi* brocades, Chinese silks and Russian furs, Armenian carpets and Frankish (European) cloth were also handled by its merchants, many of them Jews.[38]

The principal weaves are plain compound tabby and twill and a new development,

lampas, with a smooth ground and slightly raised design. Calligraphy is prominent in designs which re-create earlier iconography, with eagles, peacocks, ibexes, and human figures hunting. Ground decoration is much richer, a feature of Saljūq silks.

Some pieces bear only inscriptions, none of which indicate where they were made. The key pieces have two inscriptions. The upper one reads:

> Glory and prosperity to the king
> of kings . . . (Bah)ā al-daula, the
> light of the community and the
> refuge of the nation . . . the crown
> of the community, may his life be long.

and the lower one:

> for the use of Abī Saʿīd
> Zādānfarrukh, son of Āzādmard,
> the treasurer.[39]

Figured textiles were evidently not prohibited in Daylamite burial practice, accompanied by funerary texts or not. One, with detached roundels enclosing pairs of collared, winged goats or ibexes and a tree, and borders busy with small animals, is dated by an inscription: 'In the year 388' (AD 998).[40] A large group has eagles, a favourite motif at the time from Eastern Islam and Byzantium to Muslim Spain. Six great double-headed birds in pairs cover the ground of a lampas in Cleveland. Lions are grasped in their talons, on their wings are cocks and the inscription 'Pity', and their bodies suport human figures. This iconography is obscure, but may derive from the Greek Ganymede legend.[41] Eagles and smaller hawks have foliated, horn-like crests which persist on Saljūq textiles. However, the lines of demarcation between Buyid and Saljūq weaving are blurred and some fabrics, after further study, will no doubt be re-attributed. Among the most beautiful are silks in muted colours depicting horsemen with hawks or hunting hares and an investiture on elephants, the figures paired and enclosed in hexagonal frames of interlaced strapwork.

14. *Sphinxes and foliage in interlacing bands*, possibly from Rayy. Saljūq, 5th–6th/11th–12th centuries. Silk lampas, 61 × 24 cm. Textile Museum, Washington D.C., 3.212.



The few surviving Saljūq silks present a different problem, namely, whether they should be attributed to Persia or Anatolia.[42] While still in their tribal state in Central Asia the Turks were known for their felts – their carpets are not mentioned.[43] Saljūq conquests in Anatolia brought them into contact with Byzantine and Armenian industries but, according to Ibn Khaldūn, they established no *ṭirāz* system, obtaining inscribed silks from commercial workshops, adding 'they call this stuff *zarkash* from a name borrowed from the Persians'.[44] Saljūq textiles attributed to Anatolia are quite different from Saljūq carpets in design and closer to those of Persia, where Turkish conquerors took over Buyid workshops and designs. Arab writers list substantially the same provinces of Khūzistān, Khurāsān and Sīstān and the towns of Nīshāpūr and Rayy, with the newer Yazd and Kāshān as the major centres. It might be postulated, though without firmer evidence, that the early influences on Saljūq silks in the east and west were Persian.

Variations appeared in standard weaves. For instance, tight and loose-spun threads enhanced the texture of compound cloths, and a new weave, brocade, appears.[45] Most silks are of two colours. The roundel persisted but hexagonal frames and bands were favoured and, for the first time, there were no enclosing frames. Secondary ornament is crowded and delicately drawn, of geometric infilling or scrolling stems, tendrils and Chinese-inspired lotus palmettes, similar to the ceramic decoration of Rayy and Kāshān.

Despite the political breakdown of the Islamic world, cultural unity is apparent in the widespread use of certain motifs. The eagle, the Saljūq badge, the griffin, sphinx and harpy are common to the silks of Saljūq Persia and Anatolia, Syria, Egypt and Muslim Spain. A recently-discovered silk double-cloth with no repeat frames shows griffins with Sasanian wings and pearl collars and Buyid foliated crests, standing among tendrilled stems and palmettes.[46] The sphinx appears in two forms: male, bearded and crowned, descended from the Achaemenian type which survived at Persepolis (pl. 14),[47] and a beardless sphinx which must surely derive from ancient Egypt and was resurrected in Fatimid Egypt. Both sphinxes occur in Persian silks. Two pairs of beardless creatures appear in a roundel, possibly from Rayy, with a funerary inscription.[48] Other animals in the Saljūq repertory are lions and leopards but birds were the most popular, often paired and among foliage in band-stripes.

TIMURID, SAFAVID AND QĀJĀR PERIODS

Timurid textiles are rare, and knowledge of them derives chiefly from such travellers as Marco Polo, who reports thriving industries, and from miniatures, which show clothing

with small arabesque designs.[49] However, Tabrīz, Kāshān, Yazd, Iṣfahān and cities in Khurāsān had weaving industries in the early Safavid era, arguing continuity, and the principal Safavid weaves, twill, satin, lampas, brocade and velvet were known. Safavid weavers developed lampas to produce intricate narrative designs in many colours, compound weaves were given shimmering gold grounds and velvet, a comparatively recent import, many layers of texture.

The Safavid dynasty (905–1135/1499–1722) united Persia in the Shīʿī rite and Persia continued to use the human figure in textiles when Turkey and Europe were turning to non-figural designs. The early shāhs took an interest in weaving. The first Shāh, Ismāʿīl, boosted silk and cotton industries, founded new centres and promoted trade with Turkey, India and China. Silks survive from the reign of his successor, Shāh Ṭahmāsp (930–84/1524–76), when Kāshān was the most important textile city, exporting brocades, satins and velvets as well as silk carpets.

The fourth shāh, ʿAbbās I (995–1038/1587–1629) moved the capital to the old city of Iṣfahān. For such achievement as his reign produced, several factors and the right timing are necessary: political stability and economic prosperity, and a strong ruler whose reign is long and who is a connoisseur and patron on a grand scale. That Shāh ʿAbbās was such a man cannot be denied. He made Persia's textile industries crucial to his policy to centralise the country, which was large, with a diffuse population, and difficult to rule. He fostered sericulture, still most important in the Caspian provinces, the tending of silkworm grubs the work of women and children.[50] *Abrīshum*, raw silk, was exported to Europe and Russia. He closely supervised the organisation of silk-weaving in a manner reminiscent of the old *ṭirāz* system, so that it became Persia's most important industry, and encouraged trade.

Iṣfahān became not only one of the great cities of Islam but the shāh's power-house, where he gathered artists, literati and foreign merchants and travellers, some of whom left written accounts. Court and commercial weaving workshops flourished. Chardin reports thirty-two ateliers in the palace grounds where craftsmen of all kinds worked together, organised in guilds.[52] The Jewish community engaged in dyeing and embroidery. Ibn al-Faqīh wrote that in his time there were more Jews, weavers and adulterers in Iṣfahān than anywhere else.[53] A new Armenian population, transported from Āzarbāījān by the shāh, came to New Julfa in 1013–16/1604–7. Traditionally merchants with long-established trade networks in the East and West, they handled the greater volume of the silk export trade for, despite the efforts of successive shāhs, direct trade with north-west Europe was never large.[54] Armenians were also involved in textile production, for Cornelis de Bruyn noted in 1116/1704 that one district of New Julfa was 'full of weavers and artificers in stuffs' adding 'among whom are some Frenchmen'.[55]

Palace artists were versatile. Those involved in the arts of the book influenced carpet and textile compositions. Fantasy in poetry and myth, pictured in miniatures, appeared on sumptuous fabrics, and the languid style of later painting was equally suited to textiles.

Clothing, as always, was an indication of social status. Many layers were worn by men and women. Miniatures and silks of the early period show a tall, elegant silhouette for men, with a long-sleeved, knee-length coat over shirt and trousers, and another robe or coat, belted or loose and sometimes with exaggerated sleeves, in a stiff fabric. The 'baton' turban added height.[56] Women wore a robe over an undershirt and trousers and perhaps a second robe and a long coat, the layers in different colours and patterns. At all times they wore a white head-cloth, *charqad*, and, out-of-doors, the long *chādur*, white with a black horsehair veil or a mask, *pīcheh*. In the 11th/17th century these shapes changed. The man's robe was now bell-skirted under a loose, sleeveless hip-length jacket or a long, full coat. The turban became lower, broader and often of two fabrics,[57] and young men sometimes wore a dashing brimmed hat. Women's coats were also bell-shaped, sashed and calf-length, leaving trousers visible, tucked into ankle-boots. European influence on fabrics and garments was apparent.

The sleeve merits special mention. In Timurid and early Safavid miniatures both sexes wear sleeves of disproportionate length. They are often worn by courtiers, who hide their hands in their sleeves in respect. Sleeves express the wearer's emotion: contemplation; the trepidation of Firdausī as he approaches the Ghaznavid poets;[58] dismay shown by three men watching the old Shaykh of Sanʿan renounce Islam for love;[59] and intoxication, real and spiritual, which causes elderly men to wave their sleeves in abandon.[60] In the painting *Dancing Dervishes*,[61] the sleeves of the Ṣūfī dervishes move in their mystical dance, while others hang limp as their wearers succumb to dizziness (pl. 15). Sleeves also hung unused down the back and,[62] in a miniature of 1058/1648, a young man wears a short jacket fastened over one shoulder, Hussar-style, with one sleeve empty.[63] It is also shown worn by tribal women. In a miniature of *Majnūn and Laylā*, a woman stirs a cooking-pot with her arms free and a sleeve held out of the way.[64]

15. *Dancing Dervishes*, from Ḥafiẓ's *Dīvān*. Harat School, 896/1490. Metropolitan Museum of Art, New York.





16. *Life in the Camp*, from Niẓāmī's *Khamseh*, copy written for Shāh Tahmāsp, miniatures by Mīr Sayyid ʿAlī, Tabrīz, 947/1540. Fogg Art Museum, Harvard University, Cambridge, Mass.



17. *Majnūn eavesdrops on Laylā's Camp*, from Jāmī's *Haft Aurang*, miniature attributed to Shaykh Muḥammad, ?Mashhad, 963–73/1556–65. Freer Gallery of Art, Washington D.C., folio 253 recto.

Early evidence in Persia of this coat is the *candys*, worn by Mede officials at Persepolis with the sleeves unused. Xenophon writes of Cyrus: 'His hands he kept outside his sleeves',[65] while his troops wore theirs for inspection, doubtless as a security precaution. S.I. Rudenko associated the *candys* with garments with closed sleeves at Pazyryk and a coat startlingly close to the Türkmen women's mantle (see pl. 34) from another tribal burial at Katanda.[66] Deriving from the riding-dress of ancient horse-nomads of north-east Asia, it was worn over the shoulders, and became widely diffused in Central Asia, China, and much later, as court and noble dress in Ottoman Turkey, where the sleeves hung down at the back. Rural forms have largely disappeared in the former Ottoman dominions,[67] but in Iran it survives among Kurdish and Turkic shepherds and Türkmen women.

The garden was a dominant theme in early Safavid textiles. Pope described the garden as 'one of the fundamental ideas of the whole of Iranian culture'. Tavernier thought Safavid gardens were 'not so well kept as ours in Europe',[68] but the English traveller Thomas Herbert, who visited Persia at the end of the reign of Shāh ʿAbbās I, described the royal garden of Hazār Jarīb as 'so sweet and verdant that you might call it another paradise',[69] echoing the theological link. The Persian garden was often enclosed behind a wall or fence, and important requirements were water (the *chahār-bāgh* was a Persian invention), and shade given by a few choice trees, the *chinār*, cypress, mulberry or pistachio. Cool and restful for contemplation – Chardin noticed that Persians did not walk in their gardens but sat, savouring the air[70] – and protected against the hot, dusty land or from human intruders outside, the garden is idealised in poetry, which describes feasting, conversation and courtship in gardens. Some miniatures and textiles have dark grounds, subtly suggesting that the events they depict take place in a garden's cool shade (see chapter 13, pl. 19).[71]

As well as dress, patterned textiles were used as furnishings and animal-trappings, they were hung in the streets and laid on the path of state processions. They also lined and covered tents.

Tribal life in Persia dates back millennia, and the tent has always been part of the Persian scene, whether that of the nomad, which evolved as an easily transported home, or of rulers who lived a semi-nomadic life, travelling their dominions, taking tents into battle or holding court in grand encampments, erected like stage-sets.[72]

Tents proliferate in miniature paintings from the Timurid period to the mid-10th/16th century, when tiled pavilions superceded them. Most common is the round felt-roofed tent of Central Asia, the Mongol *ger* or the *ev* or *yurt* of Turkic nomads, shown in a miniature with *Khusrau and Shīrīn* with a wood roof-wheel, plain covers and the tent lattice inside.[73] This tent also appears with rich covers, presumably of fashionable fabric. The black goat-hair pole tent of the Near East is not so frequently depicted since it was used principally in the south, and its adoption by Persian tribes was probably a climatic rather than a cultural change. A miniature, *Life in the Camp* by Mīr Sayyid ʿAlī of *c.*947/1540,[74] shows in detail a nomad camp with four *yurts*, one covered with arabesque-patterned cloth and another encased in an ogival fabric with phoenixes (pl. 16). There are also two pole tents, a black one with a floor-carpet and a white one with a gelim hung inside. The interior of a large audience tent with a central pole is lined with ogival medallions similar to those on Turkish tents, and the floor is strewn with carpets. This is a *yurt*, with a roof-flap, but the nomadic *yurt* is a small structure and ropes and poles would be necessary to balance larger ones. Clavijo, who met Tīmūr in 806/1404 at Samarqand in a garden-park with two hundred tents, describes an enormous domed tent of sumptuous fabrics, with twelve poles and five hundred ropes to keep it erect.[75] He awaited Tīmūr under an awning 'of a white linen stuff overset and let into with coloured embroidery, held taut by poles and ropes'.[76] These too occur in miniatures. In a scene where Majnūn eavesdrops in Laylā's camp (pl. 17) awnings with carpet medallions and ogival gold-ground textiles, bordered with scarlet and white, dominate the composition.[77]

To what extent is this display artists' licence? No Persian tents comparable to the Ottoman war tents survive,[78] but fragments of about 1008/1600 appear to be parts of a tent. Of cut, voided velvet on a satin and gold ground, the roof is circular and depicts a crowded hunting scene in the manner of mid 10th/16th-century hunting carpets (pl. 21),[79] with horsemen shooting arrows at gazelles, others with hunting leopards on their saddles and one man holding a musket.[80] Lobed ogival medallions also show this scene,[81] with a man slaying a dragon with a rock,[82] and Shīrīn bathing. A medallion with the latter scene, in the Keir collection, has on the saddle of Shīrīn's horse the inscription *ʿAmala Ghiyāth*.[83] The dimensions indicate a small tent, and the medallions have been cut at random, which suggests clumsy recycling, but they are a glimpse of lost splendour,[84] and the traditions they illustrate lasted until recently. A century ago the Qashqā'ī tribes still decked the interiors of their open-fronted summer tents with printed *qalamqār*, and awnings are still brought out at village weddings.

Textiles of the 10th/16th century are dominated by lively narrative scenes, adapted from miniatures to weaving. The confines of the repeat were avoided by placing figures in rows alternately facing right and left, by varying the colours of repeats, and by felicitous plant detail. Hunting scenes were still popular. An early lampas of the mid century, with the ancient theme of felines attacking their prey,[85] was superceded by human hunts on foot and horseback (as on the tent-roof mentioned above), and on camel-back. In a later silk, of *c.*1008/1600, the horizontal repeat has been skilfully evaded by the balance of colours – ivory for camels and their riders, yellow for jagged rocks and gazelles – while the hunters' lances form strong diagonals (pl. 18). This red compound weave is also notable for the finesse of its black outlines.[86]

Several silks show prisoners with their captives. In a mid-10th/16th-century textile a Safavid prince with a small page riding behind him leads a prisoner with distinctly Oriental features and a patterned caftan, who might be Uzbek (pl. 19).[87] Courting phoenixes lend a benign air. A later lampas of about 1008/1600, in the Keir collection, shows a young prince on foot leading a prisoner, and has the same unwarlike atmosphere.[88]

Genre scenes, a feature of 11th/17th-century design, also occur in the previous century. Single elegant youths holding wine-bottles and cups, in landscapes with water, cypresses and pairs of birds were taken from literary themes of love, both earthly and spiritual (pl. 23).[89] Or they may be receiving wine and food from servants. A late 10th/16th-century lampas has one young man seated on a throne with a servant holding a rose-water bottle and another, seated cross-legged, is offered a dish of pomegranates by a kneeling servant. The ground is dense blue-black, a foil for figures and large, graceful, serrated leaves and palmettes which replace the more usual trees.[90]

Of poetic themes, the favourite Laylā and Majnūn story receives special treatment in weaving. The skeletal hero, in the desert and surrounded by the animals which have befriended him, is visited by Laylā on foot[91] or, in a lampas of the late 10th/16th century, riding a camel in a *howdah* which bears the inscription *Ghiyāth* (pl. 20).[92] Phyllis Ackerman identified Ghiyāth al-Dīn as a designer/weaver and versifier who worked in Yazd, his birthplace, and at the Iṣfahān Court, where he supposedly taught Shāh ʿAbbās to weave.[93] His signature, which was also inscribed on one of the velvet tent-medallions, occurs on lampases, double-cloths and velvets, raising the question of whether he was proficient in all these weaves, each of which requires a different skill, or if his designs were woven by others.

Velvet became the most fashionable fabric in Shāh ʿAbbās's reign. Earlier Safavid velvets show the same vivacious scenes as flat-weaves, with figures and plants in cut pile, above a voided ground of satin enriched with gold. That later designs are simpler is due not only to



18. *Gazelle Hunt on Camels*, *c.*1009/1600. Plain compound cloth. 50.5 × 41 cm. 4 fragments. Keir Collection, London, 101.



19. *Prince with Captive*, mid-10/16th century. Silk lampas. 120.7 × 67.3 cm. Metropolitan Museum of Art, New York, 28.13.



20. *Majnūn and Laylā in the Desert*, late 10th/16th to early 11th/17th century. Silk lampas, with inscription: *Work of Ghiyāth* on the *howdah*. 51 × 68.5 cm. Textile Museum, Washington D.C., 3.312.

21. Circular tent roof with hunting scenes, mid-10th/16th century. Silk velvet, cut and voided on satin/metal ground. Diameter: 96 cm. Museum of Fine Arts, Boston, 28.13.





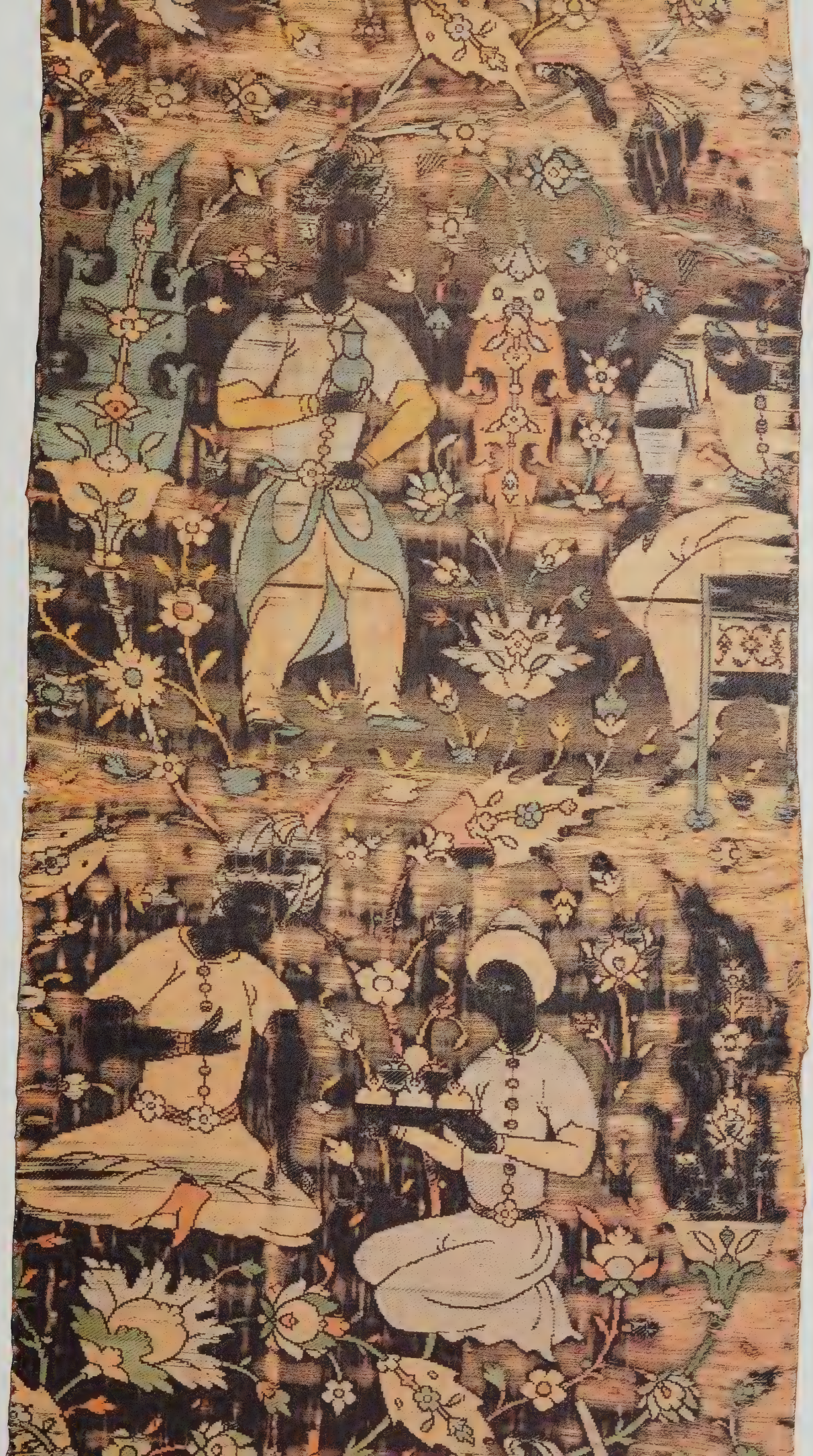
22. *Falconer* (and detail) hexagonal repeat, mid-10th/16th century. Silk velvet, cut and voided on metal/satin ground. 51.3 × 54.5 cm. Textile Museum, Washington D.C., 3.219.

the nature of this weave, but also to the developing fashion for portrayals of peaceful pursuits: princes, courtiers and musicians in garden settings.

Perhaps the finest early piece, of the mid-10th/16th century, shows a young falconer, whose hawk has spotted a flying duck, flushed out by the servant who carries the game bag (pl. 22 and detail). Enclosed in rows of hexagonal medallions, this scene is repeated, but in different colours, on a red pile ground. Curving stems forming a lattice have lion masks – a European touch? – and spotted snakes coiling in palmettes.[94]



23. (*facing page*) *Young nobles with servants in a garden*, late 10th/16th century. Part of a coat, silk lampas. 148.5 × 35.5 cm. Whitworth Art Gallery, University of Manchester, 8276.





24. Prayer mat, late 10th/16th to early 11th/17th centuries. Inscription, bottom left: *The work of Mughīth*. Silk velvet, cut and voided on satin/metal ground. 107 × 24 cm. Victoria and Albert Museum, London. T.9.1915.

25. *Ladies beside a pool*, early 11th/17th century. Inscription: *The work of Ṣafī*. Silk velvet, cut and voided on satin/metal ground. 196 × 57 cm. Royal Ontario Museum, Toronto, 962.60.1.



Non-figural velvets in the Italian and Turkish manner have survived. A mid-10th/16th-century ogival design, composed of stems, leaves and palmettes, has a more delicate sub-pattern of scrolling stems.[95] More obviously Persian, and arguably one of the finest velvets to have survived, is a hanging of the late 10th/16th to early 11th/17th centuries in a prayer-rug design (pl. 24). Under a cusped arch, on a deep blue pile ground is a single stem with three large palmettes, and side stems forming three ogives, with cloudbands and hovering butterflies. The spandrels, of voided silver, are filled with prunus blossom, and in the borders tiny serrated leaves enclose florets. At the bottom left corner, an inscription reads, 'the work of Mughīth'.[96]

One group of velvets has repeats of ladies standing beside pools. On gold satin grounds and in the softer palette of the early 11th/17th century, some of these velvets are of narrow loom-width, while others accommodate rows of four ladies.[97] Their curved figures echoed by flowering stems, some of them hold falcons or hounds on leashes or lances, and others have jugs, bowls or flowers in their hands (pl. 25). They wear fashionable short jackets, sashed or unbelted, and the low-cut bodices, bows at the breast and tiny caps all demonstrate European influence. Two pieces have 'the work of Ṣafī' inscribed above each lady's head.[98] A similar group shows young men, each wearing the wide turban of Shāh ʿAbbās's reign, a long robe with a dagger hanging from the sash, with a large hawk on his gloved hand. A kneeling servant holds a water-jug. On the ground is the falcon's hood and a dead bird minus one leg, with which the falconer will reward his bird.[99] Slightly different versions, also of velvet, have dress details of silver uncut loops, and falcons of a smaller species.[100] The curving, plumpish figure-style is that of Rizā-i ʿAbbāsī, court painter of Shāh ʿAbbās I. His son, Shafīʿ ʿAbbāsī, who was greatly influenced by his father, became court painter to Shāh ʿAbbās II (1052–77/1642–66). Shafīʿ also designed carpets and textiles and the signature on these velvets is likely to be his.

The apogee of this style is a marvellous coat, given to Queen Christina of Sweden by the Russian Czar in 1054/1644 (pl. 27).[101] It has elongated sleeves, and is of gold-ground velvet with a pile pattern of youths holding wine-cups and ewers, their dashing brimmed hats echoing the almost gothic curve of their bodies, which are clad in coats decorated with serrated leaves. Here is the ultimate conceit of the fashionable Persian gentleman, to wear a coat embellished with beautiful youths like himself.

Embroidered versions of Safavid woven designs are preserved. An ancient skill in Persia, the embroidery of Kirmān women 'in silk of all colours with beasts and birds and many other figures' was singled out by Marco Polo as 'a delight to the eye'.[102] The most common Safavid embroideries to survive show the popular scenes of mid to late 10th/16th-century woven silks, worked in surface stitches and appliqué. More unusual is the circular cover of pl. 26 which has carpet motifs: a central eight-pointed star, palmettes and serrated leaves, and a floral meander border. Its surface-darning technique would seem to place it with later embroideries from the north-west Caspian provinces. Together with the velvet prayer-mat (pl. 24) this piece provides scarce evidence of an overspill of Safavid carpet patterns into weaving and embroidery. And to these can be added the stiff, gold-ground robe and veil, woven with serrated leaves and palmettes, worn by Teresia, wife of Sir Robert Sherley, and the rich mantle of her husband, with its palmettes and *peris*, in their portraits by Anthony van Dyck (pl. 29).

Brief mention must also be made of printed and painted cottons, *qalamqār*, literally 'pen work', from the *qalam*, a ball of fibres wrapped round a wood stem and soaked with liquid dye, which is released by controlled pressure as the craftsman draws on the cloth surface. In fact, many processes are involved: bleaching, wax-resist, the application of mordants, dyeing and stamping with wood blocks as well as hand-painting, which may be used only for outlines and details.[103]

Archaeological evidence suggests that the difficult skills of cotton preparation and mordant dyeing were first mastered in north India in the 3rd millenium BC.[104] Later Persian and Indian industries were so closely linked by trade that no clear picture has yet emerged.[105] For instance, in the Safavid period factories at Madras and Masulipatam, on India's west coast, encouraged by the Mughal Emperor Akbar (949–1113/1542–1605), produced fine painted cottons with Persian-inspired designs for the Persian market, possibly with a nucleus of Persian craftsmen. Ancient industries existed in Yazd, Kirmān and, particularly, Iṣfahān, surviving despite competition from the Indian cloths, and, the cheap, mass-produced European cottons of the 13th/19th century. Jean de Thevenot made the interesting comment: 'Persians cover themselves with a quilted coverlat set with oilet holes, and over it a cloth painted with flowers and other trifles. These they call Indian cloths, because most of them are made in the Indies, nevertheless a great many are also made in Persia.' In the British East India Company's early archives they are named 'Perses'.

Qalamqār was put to many domestic uses beside the one quoted above. A printed cotton



26. Embroidered cover with carpet patterns, north-west Iran, late 10th/16th century. Linen, embroidered with silks in surface darning, double running and backstitch. Diameter: 75 cm., fringe: 9 cm. Whitworth Art Gallery, University of Manchester, 9017.

mat covered and protected precious floor carpets when meals were served. A typical cover, floral-patterned with a striped bias edging, appears in a miniature of 945–50/1539–43, *Barbad Playing to Khusrau*, attributed to Mīrzā ʿAlī.[106] On it are sugar-cones, a jug and a rosewater ewer. It was also made into hangings, cushions and a distinctive type of prayer-mat. This popular art was revived under the Pahlavi dynasty and once again the Iṣfahān bazaar echoed to the sound of hand block-printing, in traditional designs on the typical buff-coloured, unbleached cloth (pl. 28).



28. Block-printing in Iṣfahān's Grand Bazaar, early 1970.



27. Long-sleeved coat, patterned with drinking dandies, first half of the 11th/17th century. Silk velvet, cut and voided on satin/metal ground. H:123 cm. Royal Armoury, Stockholm, 3414.



29. *Elizabeth, or Teresia, Circassian wife of Sir Robert Sherley*, wearing a robe and veil of Persian silk, by Sir Anthony van Dyck (1599–1641). Petworth House, Sussex (National Trust).

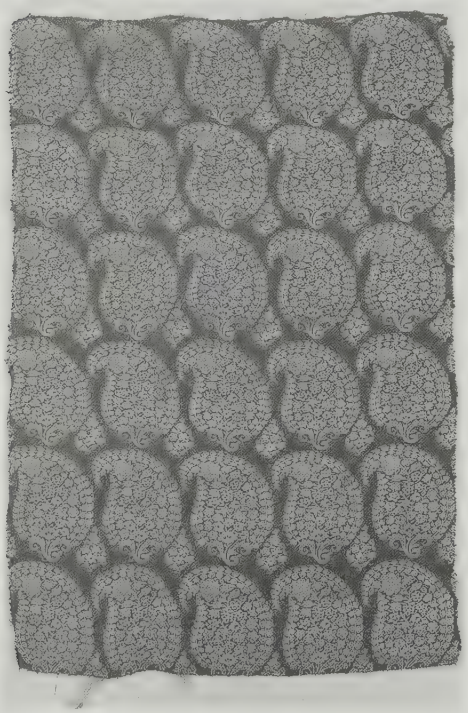


30. *Flowering bush with songbird*, 12th/18th century. Brocaded design on ground of calendered silk taffeta. 61 × 91.5 cm. Whitworth Art Gallery, University of Manchester, 9622.



31. *Rose bush* in the style of Shafī'Abbāsī, 11th to 12th/17th–18th centuries. Plainweave metal-ground silk. 34 × 30.5 cm. Whitworth Art Gallery, University of Manchester, 10941.

32. Shawl fragment: būteh composed of flowers, Kāshān, second half of 13th/19th century. Silk twill, 55 × 38 cm. Textile Museum, Washington D.C., 3.159.



Persian silk-weaving reached a peak under Shāh 'Abbās II. Such brief splendour has blossomed elsewhere under one ruler: the French silk industry of Louis XIV is an example. The last Safavid shāh, Sulṭān Ḥusayn (1105–35/1694–1722), lived ostentatiously and weaving continued in Yazd, Iṣfahān and Kāshān. The royal wardrobe was burnt every seven years and the gold recycled – a sign of the times.

The 12th/18th century was punctuated by political uncertainty. Prosperity revived briefly under Nādir Shāh (1148/9–60/1736–47), for whose coronation 100,000 robes, including *khil'at*, robes of honour intended as gifts, were required.[107] After his reign the state industries rapidly declined. By 1163/1750 sericulture in Māzandarān had almost disappeared after 1400 years. Nevertheless, recent study reveals artistic innovation, and the beginning of styles developed under the Qājārs.[108]

Late Safavid figure-studies were superceded by the European-influenced oil portrait, and a new floral style of the lacquer-painter 'Alī Ashraf was to oust the human figure in textile design (see chapter 14). Overblown roses, reminiscent of European 'slips', on gold grounds with small birds (the *gul-u bulbul* or 'rose and bird' design) or butterflies dominated (pl. 30).[109] Irises, poppies and small blue flowers resembling the viola, all from the Safavid garden, bloomed in rows, in ogival lattice or stripes, for furnishing and clothing (pl. 31). Taffeta with brocaded flowers, the ground calendered or stamped, made the fashionable coats, waisted, bell-skirted and long-sleeved – Chardin's *cadabi*.[110] Persian and imported Indian silks become more difficult to distinguish from this time.

The Qājār dynasty (1193–1343/1779–1925), brought stability, encouraging silk-weaving in Kirmān and Yazd, and cotton production in Iṣfahān, though chiefly for domestic use. For Persia became caught up in world events, and taste for foreign goods increased. Kashmir shawls were preferred to Kirmān, Indian printed cottons to Persian *qalamqār*, and by the mid-13th/19th century cheap European cotton goods threatened native industries, as they did in India. Kāshān, with 8000 silk looms in the 11th/17th century, by the mid-13th/19th had 800. Iṣfahān's looms, which had numbered 1,250 in 1212/1797, were reduced to 12 by the 1870s, after a silk-worm epidemic had ruined sericulture.[111] Smaller workshops and rural and tribal crafts took their place.

Fatḥ 'Alī Shāh's self-projected image is unmistakable. His portraits show his dark eyes, 'ambrosial beard'[112] and the wasp-waisted coats he affected, encrusted with polychrome and gold jewellery (see chapters 11 and 14). His courtiers followed suit with similar coats, often with tiny 'spot' patterns, and decorated sashes.[113] Tall turbans or pyramid-shaped hats added height. Although modest in white *chādurs* out of doors, inside women wore low-cut or translucent upper garments under tight, long-sleeved jackets and long, voluminous skirts which later became short. A cap was worn over long, loose hair. The favourite motif for men's coats and women's skirts and shawls was the *būteh* (pl. 32) composed of tightly packed florets, and often on a dark ground of woven or printed fabric. The *būteh* was the leitmotif of Senneh gelīms, made in the Qājār town of Sanandaj,[114] and a major field pattern on Afshār and Qashqā'ī tribal carpets and animal-trappings well into the 14th/20th century (see chapter 8).

Dress became more Europeanised and the last heirs of Persian sartorial splendour are those tribes who have clung to their traditional finery, so different from the drab European garments imposed on the nation by Rizā Shāh. Men were condemned to wear the cloth cap hut, after the shāh's abdication, many tribesmen resumed their old headgear. Kurds and Bakhtiyārī revived their swathed headcloths, Türkmen their intimidating lamb-skin *tekfek*

and later, when the Qashqā'i were under threat from Rizā Shāh, Nāṣir Khān Qashqā'i is said to have introduced the domed felt *kulāh*, modelled on the Medes' headgear at Persepolis, past which some Qashqā'i travelled on migration.[115] Even when worn with T-shirt and jeans, the head-cover is distinctive. Among Kurdish and Qashqā'i shepherds the ancient felt mantle, *namad-i cooli* or *kapanak*, survives, the long, closed sleeves used as pockets (pl. 33). *Kulāh* and *kapanak* are made by specialists in towns.[116]

Fifty years ago Türkmen women still made the grandest and most ancient of tribal garments, a mantle with long, flat, useless sleeves, worn on the head and fastened to a jewelled tiara (pl. 34). They were embroidered on a ground of blue-black, green, yellow or white silk with geometric and plant ornament and the ancient Turkic hook motifs. The ground colour was dictated by the wearer's age and rank, and the patterns differed between tribal clans.[117] This mantle, the cut of which dates back to the 4th century BC, is now seen only at weddings.

Compared to the antiquity of Türkmen tribal costume,[118] that of Qashqā'i women, which is the most flamboyant, is recent.[119] This tribal confederation of Turkic, Persian, Lur and Arab groups, was unified only in the late 11th/17th century, and the interdependence of tribe and town in the south-west is nowhere more clearly seen than in the borrowed town garments which contribute to the many layers worn by Qashqā'ī women (pl. 35). Up to seven petticoats support a very full long skirt, once of Indian gauze but nowadays of bazaar-bought, glittering Lurex, worn over trousers, *shalvār*. An over-dress, *piran* (P), *kenak* (T), high-necked and long-sleeved has open side seams from the waist down, to accommodate the petticoats. This derives from the Safavid outer robe and over it a short velvet jacket of Qājār style is worn. Even the cap, *qulaca*, and long veil fastened under the chin are reminiscent of women's headgear in Safavid painting. Türkmen dress illustrates tribal conservatism and Qashqā'i costume tribal adaptability. Whether either can survive under increasing threat is problematic.

Love of pageantry, rich clothing and brilliant colours, which gave the impetus for her textile industries, was only one of the many continuous threads in Persia's history. Persistent national themes in myth, poetry and painting, kingship and war (paralleled in the





33. *Qashqā'i* shepherd's mantle, *kapanak*, and hat, *kulāh*, Fārs, 1975. Both of felt.

34. Woman's mantle, Tekke Türkmen, mid-14th/20th century. Silk embroidery on hand-woven silk/cotton. H: 104.5 cm. Whitworth Art Gallery, University of Manchester, T.21.1977.



35. Women's scarf-dance at a Qashqā'i wedding.

West only by the Arthurian legends), the garden and the chase, have all been translated into the discipline of weaving. And in the manipulation of silk and gold, together with subtle pattern-making, Persian textiles, like Persian carpets, have scarcely been rivalled elsewhere.

10 METALWORK

AMONGST THE HOARD of silver found in an earthenware jar somewhere in northern Persia were seven rose-water sprinklers (two of which are pairs), four incense-burners with handles, two dish incense-burners, three jugs, a handled bowl, two caskets, a spoon, and a large assortment of horse-ornaments (pls. 1–2, 6–7). Although the name of the owner remains unknown his possessions reveal the luxurious life-style enjoyed by the wealthy in 5th–6th/11th–12th-century Persia where shining silver, sometimes inlaid with black niello or enriched with gilding, embellished such items as rose-water sprinklers and wine jugs, jewellery and horse-pieces.

In the 1930s near Nihāvand in western Persia the personal equipment of a Turkish officer who must have lived and died *c.*490/1100 was found; this time the richness of silver, niello and gilding masks objects which are essentially small decorative additions to a warrior's garniture – two sets of silver belt fittings, one inlaid with niello the other parcel gilt; three silver spear or javelin butts; two silver filigree beads; a parcel-gilt and nielloed amulet case; a small gold wine cup (pl. 3); and a large silver ring designed to be attached to a leather strap bearing the officer's name, Abū Shujāʿ Īnjūtakīn (pl. 3).

A third hoard of silver objects must have been the personal plate of a late 4th/10th-century Persian officer, perhaps a Daylamite from northern Persia.[1] It consists of eleven items – three bowls, two saucers, a ewer, a bottle, a vase, a jar, a cup and a dish – all bearing in niello the name and titles of their owner the Amīr Abu'l-ʿAbbās Valkīn (or Valgīr) ibn Hārūn. This hoard is more notable for its emphasis on liquid refreshment, presumably wine.



1 and 2. (*this and following page*) Silver horse-pieces from a hoard found in northern Iran. Iran 5th–6th/11th–12th century. L.A. Mayer Memorial Institute, Jerusalem.

PATRONS

Such hoards not only tell us of the techniques used for decorating silver in early Islamic Persia, they also tell us of the type of material culture enjoyed by the wealthy of the day, and they give us an unusually rounded view of the range of precious objects of which one man might have been the proud possessor. Hoards of objects in less prized metals are more unusual and as a result the relationship of bronze or brass objects to the personal lives of their owners is more difficult to establish. In particular cases, however, inscriptions throw fascinating lights on objects and people. Take, for example, Muḥammad the rose-water seller, who probably lived in a pretentious house in the *nouveau-riche* quarter of Tayābād in Khurāsān in the 570s/1180s. In the 4th/10th and 5th/11th centuries, north-eastern Persia was famous for its zoomorphic incense-burners, and the large number of surviving examples in the form of lions shows how popular and widespread they were (e.g. pl. 4). They were usually something under ½ metre long and about the same height, and would have been easy to store and use as and when hospitality demanded. By the 6th/12th century they had ceased to be made and must have had an antique value.

Muḥammad the rose-water seller had evidently done well for himself and risen in the world, and in 577 or 579/1181–2 or 1183–4 he ordered a craftsman by the name of Jaʿfar ibn Muḥammad ibn ʿAlī to make him a reproduction antique incense-burner (pl. 5). It was to have antique decoration, a dedicatory inscription of semi-regal titles in, by now antique, kufic script, and it was to outshine all its predecessors by being well over twice their height and length – nearly 1 metre high and about 75 centimetres long. Moreover, on its chest the name of its owner and the date was to be emblazoned. Jaʿfar duly fulfilled the order and the object now embellishes the grand galleries of the Metropolitan Museum of Art in New York. The cost of filling it with incense must have been enormous: imagine the prestige of a rose-water seller who not only had sufficient wealth to fill this huge, pretentious beast but could then afford to burn the contents!



3. (*above*) Dish from hoard of objects, gold wine bowl, in the name of Abū Shujā Īnjūtakīn. 4th–5th/10–11th century British Museum, London no. 1939.11–12.

4. Incense-burner, bronze inlaid with silver, signed by ʿAlī ibn Muḥammad al-Tājī. Iran, 4th–5th/10th–11th century. State Hermitage Museum, Leningrad, no. Up.1565.

Grand titles are also found on a magnificent inlaid bronze bucket, known as the 'Bobrinski bucket' after it pre-Revolution Russian owner (pls. 8 and 9). This object is famous for the fact that its inscriptions contain the date of the object (Muḥarram 559/December 1163), the name of the city where it was manufactured (Herat), and the name of its makers and patrons. The dedicatory inscription reads:

> This was ordered by ʿAbd al-Raḥmān ibn ʿAbd Allāh al-Rashīdī. Muḥammad ibn ʿAbd al-Wāḥid inlaid it. Ḥājib Masʿūd ibn Aḥmad, the Harātī decorator, designed it for its owner, the most splendid Khʷāja, Rukn al-Dīn ['Pillar of Religion'], pride of the merchants, trusted by the Muslims, ornament of the pilgrimage and the two sanctuaries, Rashīd ad-Dīn ʿAzīzī ibn Abu'l-Ḥusayn Zanjānī, may his glory be perpetual.[2]

The other inscriptions on the bucket offer profuse blessings to its owner, and the elaborate inlaid decoration, the different styles of script used, the enthroned figures, armed horsemen, hunters, drinkers, wrestlers, musicians and back-gammon players ornamenting it all point to the owner's extravagant outlook on life. The actual owner, however, seems to have been a rich merchant who saw himself as one of the religious as well as commercial élite of his day. The title 'ornament of the pilgrimage and of the two sanctuaries [Mecca and Medina]'



5. Incense-burner, bronze, made in Khurāsān for Muḥammad the rose-water seller of Tayābād in 577 or 579/1181–2 or 1183–4 Metropolitan Museum of Art, New York, Rogers Fund, 1951, no. 51.56.



6 and 7. Hoard of objects, silver with gilding and niello inlay, found in northern Iran. Iran, 5th–6th/11th–12th century. L.A. Mayer Memorial Institute, Jerusalem.





8 and 9. (detail) The Bobrinski Bucket, bronze inlaid with silver and copper, made in Herat in 559/1163. Hermitage Museum, Leningrad, no.CA14238.

10. Pen-box, brass inlaid with copper, silver and black organic material; made by Shādhī for Majd al-Mulk al-Muẓaffar. Dated 607/1210 Freer Gallery of Art, Washington D.C., no. 36.7.



11 and 12. Astrolabe, brass, signed Muḥammad ibn Abī Bakr ibn Muḥammad al-Rāshidī al-Ibarī al-Iṣfahānī, and dated 618/1221–2. Museum of the History of Science, Oxford.





together with the date of presentation (the month of Muḥarram), when the pilgrimage takes place, suggests that the bucket would have been used for ritual ablution by its owner on the pilgrimage, singling him out among his hundreds, if not thousands, of less wealthy pilgrim companions.

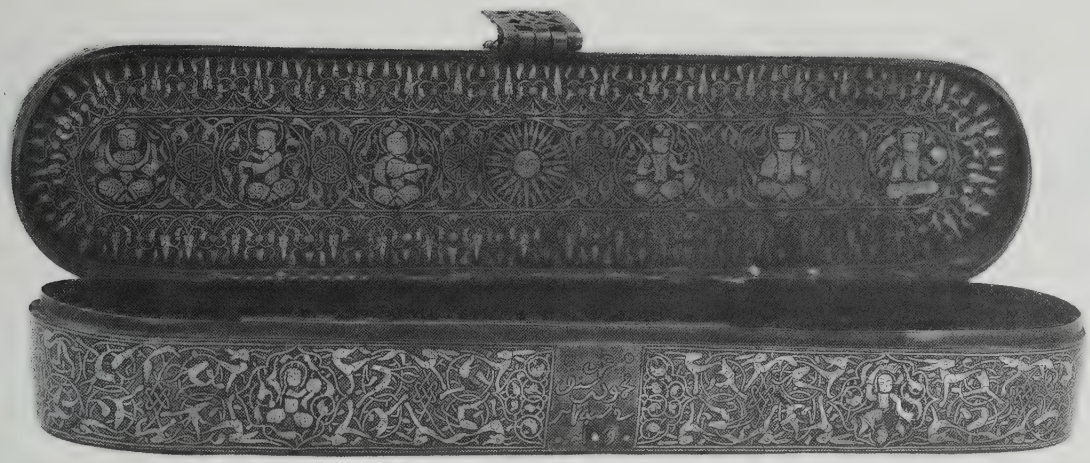
Occasionally objects survive which belonged to men who actually wielded political power and controlled the destiny of those around them. Such is a pen-case whose dedicatory inscription reads:

> The most mighty Grand-Vizier, the great, the wise, the just, the authorised, the victorious, the triumphant, Majd al-Mulk [glory of the realm], Sharaf al-Daula wa'l-Dīn [Honour of the State and Religion], hero of Islam and the Muslims, chosen among kings and sultans, light of the nation, benefactor of the people, example of the great ones and his equals, pillar of dignity, lord of viziers, king of lieutenants, the blessed, the governor of Īrān, the grand-vizier and ruler of Khurāsān, al-Muẓaffar, son of the deceased Majd al-Mulk, may God multiply his power (pl. 10).

Majd al-Mulk al-Muẓaffar was indeed a man of some political authority, acting as grand-vizier under the Khwārazm-shāh ruler of Khurāsān and Transoxiana, ʿAlā al-Dīn Muḥammad (559–617/1164–1220). Pen-boxes were used as symbols of secular power in early Islamic Persia, and this splendid example, dated 607/1210 and signed by a craftsman called Shādhī, must have been part of Majd al-Mulk's regalia. Yet, political power is transitory, and so too the worldly glory which accompanies it: having become *de facto* ruler of Marv, Majd al-Mulk died at the hands of the invading Mongols during the sack and pillage of the city in 618/1221.

But what of the craftsmen who fulfilled their customers' whims and made greatness ostentatious or pretentiousness tangible? Here we have all too little firsthand evidence, and indeed virtually none from documents. Inscriptions on objects do, however, suggest a few thoughts on the subject. For example, names of astrolabists recorded on their surviving instruments show that family businesses were an important part of the industry. Thus we find two men, apparently brothers, producing instruments in the first half of the 6th/12th century: Hibbat Allāh ibn al-Ḥusayn[3] and Yūnus ibn al-Ḥusayn.[4] And we know that Hibbat Allāh's son, Abu'l-Qāsim, continued the business, for he is named as the teacher of a quadrant maker, Abu'l-Faraj ʿĪsā.[5] Another father and son combination in the second half of the century is that of Ḥāmid ibn Maḥmūd al-Iṣfahānī and his son Muḥammad, and here again there may have been a brother also working as an astrolabist in the earlier generation, Muḥammad ibn Maḥmūd.[6] The astrolabe industry, since it required highly specialist astronomical and mathematical knowledge, might be thought to be an exception and no proof that other metal crafts were family businesses; but the fact that astrolabists bore appellatives such as *al-ibarī* (the needlemaker), *ibn al-naqqāsh* (son of the decorator), *ṣaffār* (bronze/brass worker), *ibn al-ṣaffār* (son of the bronze/brass worker) and *ibn al-naḥḥās* (son of the coppersmith) shows that they were part of a wider system found throughout the metal-working industry (pls. 11 and 12).

We also know that craftsmen remained in particular centres from one generation to another and that particular towns became famed for their products. Thus, the following towns are mentioned in medieval texts as metalworking centres: in the 4th/10th century Bukhārā for bronze, Samarqand and Marv for copper, Rabinjān and Hamadān for high tin bronze; in the 5th/11th century Baykand and Shargh for copper and Balkh for silver; in the 7th/13th century Herat for inlaid bronze or brass.[7] Artifactual evidence for Herat is found



13. Pen-box, brass inlaid with silver and gold, signed by Maḥmūd ibn Sunqur and dated 680/1281 British Museum, London, no. 91.6–23.5.

not only in the Bobrinski bucket produced there in 559/1163 but also in a ewer of beaten brass inlaid with silver and copper in 577/1181–2 by Maḥmūd ibn Muḥammad al-Haravī.[8] On the basis of these two objects we can ascribe numerous other cast bronze or beaten brass pieces to Herat in the second half of the 6th/12th and early 7th/13th century, and it is no surprise to find that the *nisba* al-Haravī is relatively common among craftsmen of the period who signed their work. A similar situation exists for Iṣfahān. Here we have no textual evidence, but the use of the Iṣfahānī *nisba* on signed astrolabes[9] makes it relatively certain that Isfahān was the centre of the astrolabe industry in the 6th/12th century. A study of these astrolabists also makes it clear that Iṣfahān had a reputation beyond the frontiers of Persia, and to be known as an Iṣfahānī astrolabist was to acquire internationally recognised prestige.

For all this apparent stability, however, craftsmen were sometimes faced with irresistible external pressures, political, economic and cultural. The most notable example in the history of Persian Islamic metalwork so far documented is the conquest of the Near East by Tīmūr round about 700/1400. Tīmūr was determined to build in Samarqand a capital that would outshine all its predecessors, and to this end gathered craftsmen from every area he conquered, from Tabrīz in 788/1386, from Shīrāz in 790/1388, from Baghdad in 795/1393, and from Damascus in 802/1400.[10] The *Vita Tamerlani* records that Tīmūr took 'the official master-craftsmen, of whom Damascus had a great number, . . . official master-craftsmen of every craft, of gold, silver, iron, cotton, linen, glass, copper, brass and almost every craft under the sun', back to Samarqand from Damascus. Our knowledge of Timurid metalwork is at present so scanty that it is impossible to trace the progress of such Syrian influence, but in the future this may become possible.

Smaller movements of craftsmen from one town to another seeking patronage must have been much more regular events. Again there is all too little documentation, but one of the astrolabists already mentioned, Hibbat Allāh ibn al-Ḥusayn, was of Iṣfahānī origin and yet probably made astrolabes in Baghdad,[11] and additional evidence may be drawn from the situation of Maḥmūd ibn Sunqur, who signed a pen-box (pl. 13) dated 680/1281. It is difficult to tell from the decoration of the pen-box exactly where he was working, though it was probably a town in western Persia or in Iraq, but we know that his (presumed) brother, Muḥammad ibn Sunqur, who signed himself al-Baghdādī, was working in Cairo, where he made an elaborate *kursī* (a mosque cabinet) and an inlaid Qur'ān box.[12] It would seem that this family broke up in order that its members might find full employment.

Economic pressures such as famine or disease would obviously exert similar pressures on craftsmen, but sometimes it was possible for adaptable craftsmen to survive with their businesses still intact, although somewhat modified. The most striking example of this situation is to be found in Khurāsān round about 500/1100.[13] Prior to this date there had been a strong but limited bronze industry, and an extremely highly developed, silver, sheet-metal industry, characterised by fine shapes, repoussé work, and polychromality, using gilding and black niello inlay. In the 6th/12th century silver shortages forced most craftsmen to give up working in precious metal, and they and their clients had to be content with a cheaper metal – brass. But the craftsmen discovered that this shining golden metal, when inlaid in silver and copper and elaborately beaten into beautiful shapes (pl. 14), could be a substitute indeed for its more highly prized predecessors and the result of this adaptability was to bring into being an industry of unparalleled importance. Not only did it give Herat a unique reputation as a metalworking centre, and take inlaid metalwork into more homes

14. Ewer, brass inlaid with silver and copper. Herat, late 6th/12th century British Museum, London, no.1848.8–5.2.



15. Rosewater sprinkler, silver with gilding and niello inlay. Iran 5th–6th/11th–12th century Freer Gallery of Art, Washington, D.C., no.50.5.

16. Dish, silver with gilding. Transoxiana or Khurāsān 5th/11th century. Bibliothèque Nationale, Cabinet des Médailles, Paris, no.75C73331.

than ever before, but it also had the most profound effects on the metal products of the Islamic Near East for three or more centuries to come.

One further comment on the Herati and Khurāsānī metal industry is called for at this point. We have noticed how repoussé work was such an important part of the sheet-metal tradition of the region in the 6th/12th century, and looking back over the earlier gold and silver products of Islamic Persia one is struck by the fact that all earlier examples of repoussé work, stretching back at least to the 4th/10th century, are stylistically attributable to north-eastern Persia.[14] A glance at pre-Islamic metalwork brings to light an outstanding group of





repoussé silver gilt ewers and bottles,[15] which in their iconography are quite different from the wine cups associated with western Persia and central Sasanian culture at this period. Is it possible that they too are products of a north-eastern workshop? If so it looks as if the north-east was a sheet-metal and repoussé centre for at least seven hundred years – a remarkable example of continuity and tradition in the metal industry.

17. Wine bowl, silver with gilding and niello inlay. Iran, *c.*500/1100. L.A. Mayer Memorial Institute, Jerusalem.



CULTURAL INFLUENCE AND THE HIERARCHY OF MATERIALS

It is already evident that craftsmen in Islamic Persia were no more free of the political and economic pressures of society than other skilled men in other countries at other periods. And it is just as true of cultural pressures. The cultural basis of the metal-working industry in Islamic Persia was first and foremost classical, i.e. Roman. Of course it is true that there was a large Sasanian element in it, and also an important Soghdian one, but since both the latter cultures also looked to Rome for inspiration that merely reinforces the statement. In the early centuries of Islam, the vast majority of shapes used in the metal industry were based on Roman prototypes – dishes, buckets, most lamp forms, polycandela, chairs, jewellery, small cosmetic items, aquamaniles (water-holders), pear-shaped ewers and lamp-stands to name but a few – and it is a striking fact that new shapes based on objects used in other cultures are extremely rare thereafter.

The only other shapes to make a widespread impact on metal craftsmen and metal fashion were those produced in allied industries in other materials. In these cases it is noticeable that the influence was from more precious to less precious – hence the bronze copies of ivory box forms and the silver copies of the more fragile glass rose-water-sprinkler shapes (pl. 15).

Dependency upon more prized materials was true within the metal industry itself. There



18. Dish, high tin bronze, inlaid with silver. Transoxiana or Khurāsān, late 6th-early 7th/late 12th–early 13th century. Musée du Louvre, Paris, 3369.

is little doubt that bronze fashion followed gold and silver throughout the period in the same way as ceramics so often seem to have followed the more expensive bronze. A good example of this process can be seen in the rise of the high tin bronze industry in north-eastern Persia and Transoxiana in early Islamic times. We know that this industry existed in pre-Islamic times, but with the establishment of Islamic civilisation in these areas the forms of objects used and their decoration changed. Three types of objects are of particular interest: bowls, dishes and stem-bowls. In the case of bowls it is noteworthy that the earliest Islamic high tin bronze bowls are usually decorated on the outside only, following a tradition known from Graeco-Bactrian, Sasanian and early Islamic silver. Moreover, one example,[16] has arcading around its sides and base and a type of disc motif recalling the decoration of Sasanian silver bottles. Similarly, 6th/12th-century high tin bronze dishes (pl. 18) are of the same shapes as silver ones (pl. 16) and geometric patterns similar to theirs already occur on silver dishes of the 4th–5th/10th–11th. Finally, the method of casting high tin bronze stem-bowls in Khurāsān in the period round about 600/1200 by casting the body and foot as one and then inserting a circular disc of metal at the top of the foot, appears to be based on a silver-smithing tradition of manufacturing wine cups, foot included, out of a single sheet of metal (pl. 17). These small pieces of evidence suggest that there may be a general if not literal truth behind an assertion of al-Bīrūnī that al-Ḥajjāj's aversion to precious metal lead to the substitution of a tin-copper alloy for the silver-copper alloy normally used for drinking vessels.[17] If correct, this would provide a reason for the growth of the high tin bronze industry in early Islamic times, its evident dependence upon silver, and its location in Transoxiana, where in pre-Islamic times, in what is now Soghdia, there had been a flourishing silversmithing industry.

Similar dependency of less precious upon more precious is found in the bronze industry itself, where baser products often mimic high tin products. Thus, for example, in north-east Persia round about 600/1200 we have a magnificent group of high tin bronze stem-bowls inlaid with silver, exemplified by the Vaso-Vescovali (pl. 19), and a contemporary group of quaternary alloy (copper, lead, zinc and tin) stem-bowls from the same area of distinctly lower quality in shape and decoration as well as in metal.[18] It is interesting to see that the same thing happens in Anatolia in the 7th/13th century, though there both groups of stem-bowls are of a different shape. Such is the pressure of money and patronage on a craftsman's work.[19]

Returning now to the political arena, one can see in more detail how craftsmen and fashions moved and changed as dynasty suceeded dynasty and as one area became dominant at the expense of another. Given the shortage of surviving objects of gold or silver we have to rely for most of our information upon the bronze industry. Here, in ʿAbbasid times it is natural that Iraq should be a centre of metalwork production, and it is noticeable that the objects manufactured there had a permanent effect on taste to the east, in Persia. For example, the four magnificent Persian Islamic aquamaniles in the Hermitage – a goose, a deer, a 3rd–4th/9th–10th-century cock, and a zebu with calf dated 603/1206[20] – belong to a tradition which is first seen in Islamic times in the central ʿAbbasid lands in a bronze bird dated 180/706–7 and three companion pieces in Berlin-Dahlem, Lucca, and St Catherine's Monastry in Sinai.[21] And the same is true of certain groups of ewer. Thus if we take the pear-shaped, low-footed, round-mouthed ewer form as an example (pl. 20), we find that it was in use in Iraq in the 3rd/9th century,[22] and then spread eastwards to continue in Iran in the 4th–7th/10th–13th century.[23] Such a process is to be expected, for by the early 4th/10th century the ʿAbbasid Caliphate was in a sad economic state. Political fragmentation of the empire, bringing with it reduced revenues from the provinces, combined with a drastic decline in agriculture in Iraq itself to bring about a dramatic decline in caliphal economic power. This must have affected urban Iraq, and with new dynasties growing up in the provinces drawing on abundant local wealth (the Samanids in north-east Persia controlled almost all the precious metal resources of eastern Islam), a drift of craftsmen from Iraq to the provinces was inevitable.

And so, indeed, it is in the north-east of Persia, in the Samanid lands, that the next period of bronze working finds its peak. Here we find a craft characterised by inventiveness and an interest in zoomorphic and ornithomorphic forms. Thus, a ewer type with a flat horizontal spout known in Iraq in the 3rd/9th century is modified by changing the spout into an animal head or a beak-like projection,[24] while incense-burners show a wide variety of designs and are often cast in the form of lions (pl. 4), bulls, partridges, or other creatures. Such inventiveness gives a richness to this period which is scarcely appropriate to the metal used – probably a quaternary alloy of copper, zinc, tin and lead which was easy to cast, and was obtained extremely cheaply by melting down old scrap metal.

The introduction of inlaid sheet brass round about 500/1100 in the north-east of Persia, to which allusion has already been made, brings into being an industry which has quite dif-



19. The Vaso-Vescovali, high tin bronze inlaid with silver. Khurāsān, late 6th or early 7th/late 12th or early 13th century. British Museum, London, no. 1950.7–25.1.



20. Ewer, bronze. Transoxiana or Khurāsān, late 6th/12th century. State Hermitage Museum, Leningrad, no.CA12745.

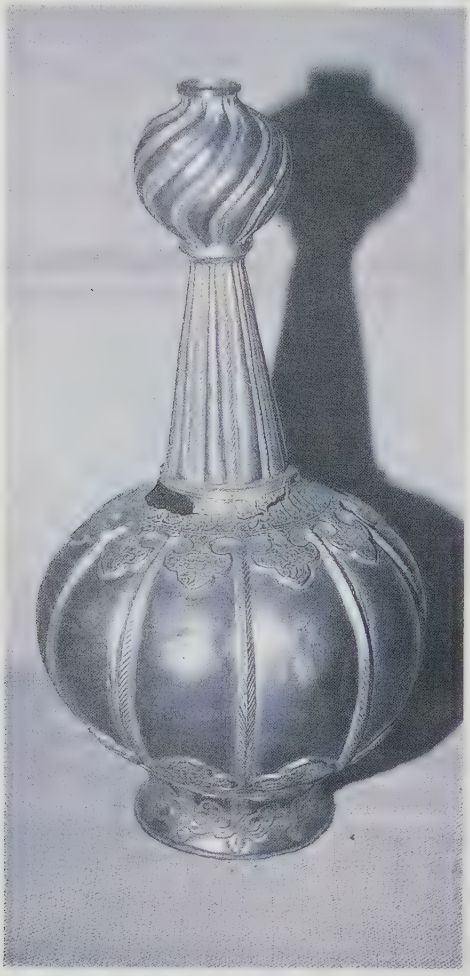
ferent characteristics from those previously in vogue. Sheet metal now rises into a position equalling high tin bronze in status; polychrome decoration, having been confined to the silver industry, introduces a new richness into the decoration of baser metals; decorative styles previously confined to the workshops of the silversmiths appear on bronze and brass objects. More surprisingly we find forms becoming standardised. The number of Khurāsānī luxury sheet-metal forms known from the 6th/12th century is very limited, and the casting industry also suffers from the same problem. For example, the wide variety of cast bronze lamps found in the 4th–5th/10th–11th centuries is reduced to one particular type[25] and cast objects also show a marked decline in quality of form, as for example the standard 6th/12th-century type of incense-burner.[26]

The taste for inlaid bronze and brass, once acquired, was not to die out for a couple of centuries, despite the reintroduction of silver coinage in Il-Khanid times after the scarcities of the 6th/12th and early 7th/13th centuries. Such imperial Il-Khanid metalwork as has come down to us is of this type, and interestingly enough it is characterised by an international style, which seems to reflect the custom in northern Iraq and Syria as much as Persian custom. Such are, for example, the window grill ball joints bearing Öljeitü's name,[27] and the incense-burner,[28] and the basin, stand and shaft unit bearing the name or



21. Ewer, brass inlaid with silver. Fārs, 8th/14th century. State Hermitage Museum, Leningard.

22. Bottle, silver with gilding, in the name of the amīr Qāsim ibn ʿAlī. Iran, late 8th/14th or early 9th/15th century. State Hermitage Museum, Leningrad, no. CK 586.



titles of Abū Saʿīd, the latter three items all belonging to the Nisan Tasi in Konya.[29] This international style is also characteristic of other objects, including the pen-box made by Maḥmūd ibn Sunqur dated 680/1281 (pl. 13). Such objects suggest that there was a short-lived school, dependent on Il-Khanid royal patronage, which may well have had its workshops at Tabrīz, in the heartlands of the Il-Khanid state.

Under their provincial successors, the Injū rulers of Shīrāz, the Muzaffarids of western Persia, and the Jalayirids of north-west Persia and Iraq, this international style formed the basis for a more localised development which shows the cultural unity of Iraq and western Persia at this period (pl. 21). For example, ewers with body spouts, a tradition previously typical of 7th/13th-century Mosul and northern Iraq, were introduced into Persia for the first time, suggesting strong cultural ties throughout the area concerned. From other points of view, however, the result of the Mongol invasions and Il-Khanid overlordship of such a vast geographical territory was to throw many cultural distinctions into the melting pot. Thus, 6th/12th-century Sīstān used a form of shallow, often cusped, ablutions basin,[30] which was quite different from the hemispherical bowl used by the Ghaznavids[31] or the buckets used in Khurāsān (pl. 14). 8th/14th-century Fārs adopted the Sīstān style of basin,[32] but it also adopted a bucket form which had gone out of fashion in both east and north-east in the 6th/12th century,[33] together with a bowl form probably developed in the Jazīra in the early 7th/13th century,[34] and stem-bowl forms which could come either from Khurāsān or Siirt, in southern Turkey.[35]

TIMUR AND THE SAFAVIDS

Tīmūr's forcible movement of craftsmen from the conquered cities to his capital of Samarqand, as noted above, provided an alternative source of cultural interchange. The great ablutions basin made by order of Tīmūr for the mosque in Turkistān City by ʿAbd al-ʿAzīz ibn Sharaf al-Dīn Tabrīzī in 801/1399 (pl. 23) may well be an example of a work by a captured bronze-founder. On the other hand, the great ablutions basin in the mosque at Herat, signed by an Iṣfahānī, Ḥasan ibn ʿAlī ibn Ḥasan ibn ʿAlī, is dated 776/1374–5,[36] which is before the sack of Iṣfahān by Tīmūr and the possible deportation of its craftsmen to his capital. One has to be cautious therefore in attributing the presence of a craftsman in a foreign city to a particular cause, unless the circumstances of his arrival can be proved.

Of other Timurid metalwork we know all too little. One group of brass jugs inlaid with silver and gold (pls. 24–5) is to be attributed to Herat in the second half of the century – dated examples span the years 861/1456 to 917/1511–12, a piece in the British Museum was made for Sulṭān Ḥusayn Bāyqarā in 903/1497,[37] and the whole group follows a shape in jade known from Samarqand in the reign of Ulugh Beg.[38] It is clear, therefore, that inlaying did not die out, though there are only the occasional pieces which seem to link the 8th/14th and second half of the 9th/15th centuries. From Clavijo's description of Tīmūr's court it is also apparent that objects of precious metal were numerous and splendid. At a reception given at court by Tīmūr to welcome the foreign ambassadors, boiled horse meat was served in large basins of gold and silver, while mare's milk sweetened with sugar was drunk from bowls and goblets of the same metals.

> In the middle within [Tīmūr's] tent, facing the doorway was placed a chest or small cabinet which was used as a stand for cups and dishes of plate. This cabinet was entirely made of gold, richly ornamented with enamel work with insets, and in height it would stand to a man's breast. The top was flat and it was enclosed at the back with the like of little battlements in green and blue enamel, which were scalloped. The whole of this cabinet was encrusted with jewels and pearls of large size, and in the centre part between the pearls and precious stones was set a single round jewel the size of a small nut, but it was not of very excellent colour. To close the cabinet was a small door, and within was kept a set of drinking vessels. These were six flasks made of gold, beautifully chased, set with pearls and precious stones, and beside then stood six round gold cups likewise adorned with pearls and jewels.[39]

Sadly, little material evidence of this wealth and ostentation survives. Two of the rare examples that do are a bottle and jug made for a certain amir by the name of Qāsim ibn ʿAlī. The bottle (pl. 22) and the jug[40], are of interest in showing how conservative taste seems to have been, for they are of forms which have changed little since the 7th/13th century. The 9th/15th century also saw the full establishment of engraved and tinned copper as a widespread metalwork type, witness for example three objects dated 811/1408–9 (pl. 26),[41] 879/1474–5 and 893/1487–8.[42] The piece dated 879/1475–5 and other related pieces suggest that there may well have been a late 9th/15th-century, west Persian school of metalwork in



23. Cauldron, bronze. Made by ʿAbd al-ʿAzīz ibn Sharaf al-Dīn Tabrīzī in 801/1399 by order of Tīmūr, for the mosque in Turkistān city. State Hermitage Museum, Leningrad.

24. (*below left*) Jug, bronze, inlaid with silver. Probably Herat, signed Ḥabīb Allāh ibn ʿAlī Bahārjānī, and dated 866/1461 Victoria and Albert Museum, London, no.943–188.

25. (*below right*) View of base of plate 24.



26. Bowl, tinned copper. Iran, dated 811/1408–9. State Hermitage Museum, Leningrad, no. VC.420.

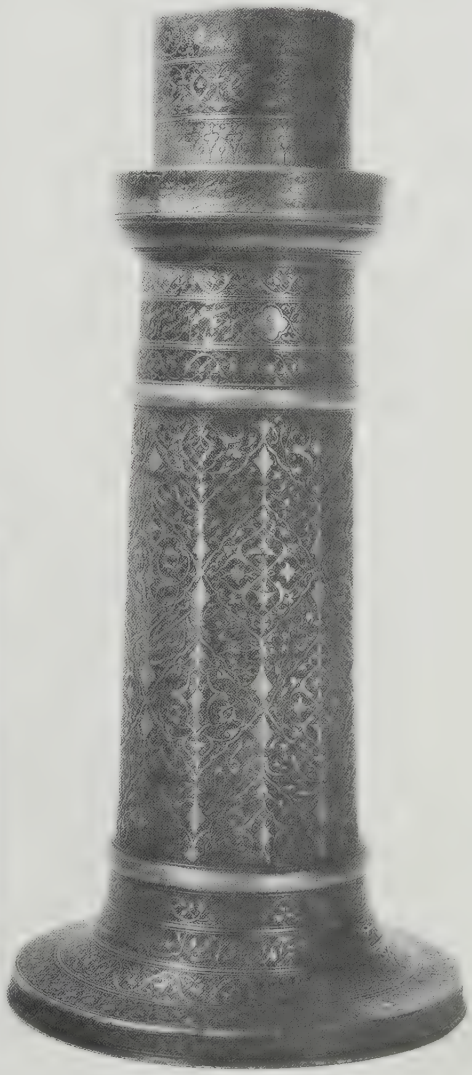
27. Torchstand, brass. Western Iran, dated 987/1579–80. State Hermitage Museum, Leningrad, no. UC.785.

close touch with craftsmen and taste in the Near East, for there is a remarkable similarity in design between particular Persian and Syrian pieces. Both seem to be at least in part derived from Iraq in the 8th/14th century. Another contemporary style with bold floral designs could derive from the Türkmen empire of western Persia, Iraq, and eastern Anatolia.[43]

Such a division continues to be true during the Safavid period, which also shows considerable continuity in form and decoration from Timurid times. For example, the famous torch-stands made in western Persia during the second half of the 10th/16th century (pl. 27) are based on a Timurid form,[44] while a form of bowl found in the north-east is many centuries older.[45] As with the previous periods extant examples of gold and silver are extremely few and far between, but closely comparable objects do exist. A belt of gilded iron presumably captured in battle by the Ottomans and inscribed with the name of the first Safavid, Shāh Ismāʿīl, is in the Topkapi Museum in Istanbul,[46] a sumptuously decorated bottle of 10th/16th-century date is in the same collection,[47] and the gilded silver door-plaques of the Masjid-i Shāh and Madrasa-yi Chahār Bāgh in Iṣfahān suggest that the taste of Shāh ʿAbbās and his successors during the 11th/17th century was luxurious to say the least. These remains tally with the descriptions of some of the European travellers of the period. Thus,









28. Pierced steel plaque. Persia, *c.*988–98/1580–90 David Collection 9/1985.

for example, Pietro della Valle records that Shāh ʿAbbās and his courtiers used gold and silver dishes with domed lids, golden wine jugs and cups, golden wine-coolers and gold and silver chandeliers.[48] We also know that the great Safavid shrine at Ardabīl in north-western Persia had gold and silver gratings and gold and silver chandeliers, and Shāh ʿAbbās is recorded as having ordered a new door of gold and a peripheral wall of silver to be manufactured specially for it.[49] Most of our knowledge of developments in the arts of metal-working during the Safavid period come, however, from less attractive objects made of tinned copper or engraved brass. The period also excels in the use of polished steel, as a fine group of pierced steel inscription plaques said to come from the Darb-i Imām in Iṣfahān demonstrate.[50] Another small plaque (pl. 28) from a similar group, emphasises the Safavid taste for arabesques alongside a beautiful silky surface and watered steel patterning.



29. Rosewater sprinkler, gold with enamelled decoration. Iran, late 12th/18th to early 13th/19th century.

30. (*facing page*) Jug, gold, in the name of Bakhtiyār ibn Muʿizz al-Daula, died 368/978 Freer Gallery of Art, Washington D.C., no.43.1.



The main function of steel was of course for arms and armour, and the Persian swordsmiths were outstanding exponents of their craft. The wootz steel from which swords were made was originally developed in India, and its use spread to the Near East in early Islamic times. Persian swords were noted for their flexibility, sharpness, and above all for their damascened patterns. Experiments in Russia during the last century showed that such swords could be bent to a right angle and would spring back into place; in fact, one could not break such a sword however far one bent it. The spring and high quality cutting edge allowed a gauze handkerchief to be cut in half in mid-air with the weapon. The patterns on the blade, the damasks (pl. 31), were infinitely variable, and depended on the crystalline structure of the blade, the way it was forged, and the compound used for etching to bring out the contrasting colours. The most famous pattern was that known as 'Muhammad's ladder', in which the blade carries round about forty transverse bands, equidistantly spaced.

High quality swordsmithing and steelworking continued in Persia up to very recent times, but of the other, baser metals and their arts in the post-Safavid period we know almost nothing. In contrast, numerous objects of precious metal datable to the 12th and 13th/18th and 19th centuries survive, particularly in the collection of the former Imperial Crown Jewels. Incrustation of gold with jewels, and elaborate enamel work is not to universal taste, but at its more sophisticated such work is of great elegance and splendour (pl. 29).

From the twelve hundred or so years of Persian metalworking history that we have tried to encompass there is one object, perhaps, which deserves our final attention, personifying as it does so much of the quality of the metalworking background from which it springs: the gold jug of the Buyid Prince Bakhtiyār ibn Muʿizz al-Daula (pl. 30). Strictly speaking this jug is monochrome but its decoration brings out that quality which is so characteristic of Persian work in precious metal, in inlaid bronze, and at a much later date in enamelling, that is, colour. Worked with astonishing precision and skill, this jug is decorated in an extremely precise and subtle way. First of all there is an interplay of light between the recessed ground and the upstanding design on the body, and that interplay is then emphasised by leaving the almost identical design on the neck in one plane. The relief work on the body is far from simple. The palmettes, stems and leaves are worked in angled repoussé usually with one punched edge to add a further three-dimensional effect, while the animals in the medallions are of slightly flatter form so that they appear at first sight to be somewhat recessed. The sweeping curves and smooth angles of the relief work are further intensified by the rigidly dotted ground. The whole gives an enthralling impression of light and colour contrast. In the face of such artistic ability can modern man really believe that creation and creativity are but chemical accidents?



31. Damask on Persian straight sword blade. Isfahan, 12/18th century (hilt and mount are Indian, mid-13th/19th century), Wallace Collection, London, no. 1434.

11 JEWELLERY

Precious metals and stones have long been worked into decorative artistic forms for the display of personal adornment, social prestige and religious purposes. Already in Egypt from 5000 BC and in Mesopotamia from around 2500 BC, attractive jewellery was being produced as the examples from Ur excavated by Sir Leonard Wooley, show (pl. 2). The inhabitants of the Iranian plateau acquired the wealth and expertise for working in metals later, as their way of life was less conducive to the arts of decoration than the more affluent societies of the Nile delta and Mesopotamia. Nevertheless, copper ornaments and strings of beads in different combinations have been discovered from the mid-Bronze Age (3000/1300 BC). Tepe Hissar, situated along the route of the lapis luzuli mines of Badakhshān grew sufficiently rich from around 2000 BC to become an early centre of silver- and gold-working, although the objects made there were rather crude and lacking in grace.

The break up of the Sumerian empire with the destruction of Ur in 2006 had important consequences for the dispersal of portable objects of booty and the scattering of craftsmen, a phenomenon which was to influence cultural history on a number of occasions. Reliable evidence, both regional and chronological, of settlements and their economies has been disturbed by uncontrolled digging so that the provenance of different objects on the antiques market has been hard to determine. At all events, there has been much movement of jewellery in all periods.

Jewellery from Susa in the first half of the second millenium included fine bracelets and necklaces with melon shaped beads and hollow gold spacers, worn by both men and women. As a result of the excavations at Turang Tepe, Hasanlu, Dinkha Tepe, Gok Tepe, Daylamān and the appearance of objects from 'Amlash', datable jewellery has been found showing the development and range of designs and techniques in northern Persia, including round and star-like repoussé pendants, moon-shaped filigree and coil earrings, rings and necklaces of carnelian beads and fluted gold hollow beads (pl. 1) as well as diadems, discs and 'buttons'. An interesting earring from Hasanlu discovered by Professor Dyson made up of a cluster of tiny gold balls like grapes, has granulation similarities with examples on Assyrian reliefs. The scope of inspiration widened to match the increasing demands of the clients. The earliest known examples in Persia of a particular gold bracelet formed of two hollow gold tubes, the one inserted in the other, with finials of lions' heads and a band of incised decoration where the head was fused to the tube, were found in a tomb at Marlik. This marks the emergence of animal-ended bracelets of increasing sophistication, which were to figure prominently in Achaemenian jewellery.

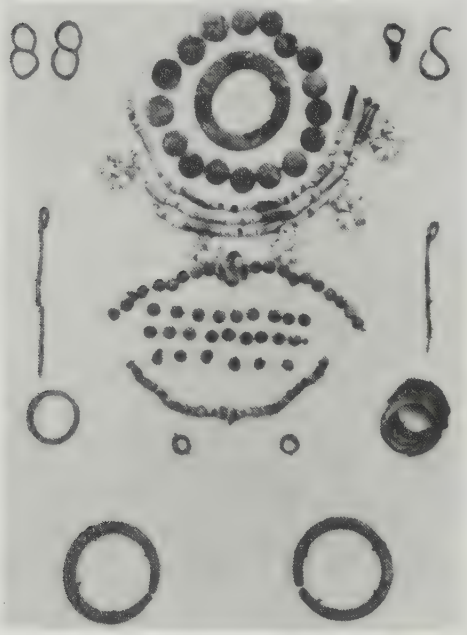
Towards the end of the second millenium, the rise of the Assyrian empire began to create a new balance of power but, at the same time, increasing migration onto the Iranian Plateau from the north brought much instability. Independent centres of local autonomy arose where there was much variety of cultural expression. In some ways, the beginning of the first millenium in the area resembled a gigantic crucible into which a variety of artistic traditions was poured. Hittite, Kassite and Urartian influences, Scythian, Assyrian, Elamite, and a multiplicity of local groupings in Luristān and Media produced a vast range of individual artistic expression and a mélange of styles, natural and animistic. The repertoire of design was enriched. Among the sites excavated in the late 1960s, has been Haftavān Tepe in western Āzarbāījān by Charles Burney where the grave of a girl (*c.*1000/800 BC) was found. She was 'lavishly decked with jewellery; wearing bronze discs, headband, bracelets, rings, anklets and seven strings of beads' (see pl. 3). Jewellery was not merely for ornament, but was also taken as booty. Palaces with their treasures and shrines with their offerings were plundered. Thus, Sargon II in his campaigns against Urartu, in 714 BC, sacked Musair with its temple to the god Haldi and carried off silver and gold, precious stones, ivory and rare woods.

It may have been for such reasons that the hoard of treasure uncovered at Ziwiyeh in

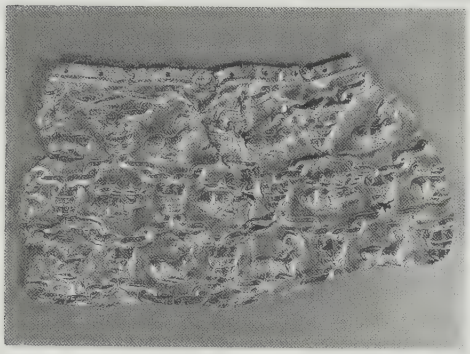
1. Gold and carnelian necklace, Gīlān, 1600 BC. Archaeological Museum, Tehran.



2. Court jewellery, Sumerian about 2500 BC, Ur, Iraq. British Museum, London.



3. Jewellery of a girl burial in grave 3, Haftavān Tepe, 1000–8000 BC.



4. Fragment of belt plaque, Ziwiyeh, 8th/7th century BC. British Museum, London.



5. Gold armlet with horned griffins, 5th–4th century AD. British Museum, London.



north-west Persia in 1947 was buried. Unfortunately, the circumstances of its discovery and its heterogeneous collection of styles with Scythian, Median, Assyrian, Urartian and other elements, make dating and authenticity difficult. A fragment of a gold belt of vigorous design in gold of lion heads, stags and mountain goats gives an indication of the naturalistic skill of the goldsmith (pl. 4). Elsewhere among the mountains and plains of the lower Zagros foothills of Luristān in the first half of the millenium, groups of people partly nomadic and partly settled, with great herds of horses, lived in close-knit communities. They developed a distinctive style of bronze-working, often naive in conception, comprising decorative and ritual ornaments, pins, standards, surmounted by demonic figures and ritualised animal motifs like totems, also daggers, swords, bowls and harness gear. Bronzes were made from moulds or cast by the lost wax process, sheet-metal techniques were also used by the smiths, who beat out designs of fabulous monsters on discs and quivers (see Chapter 2).

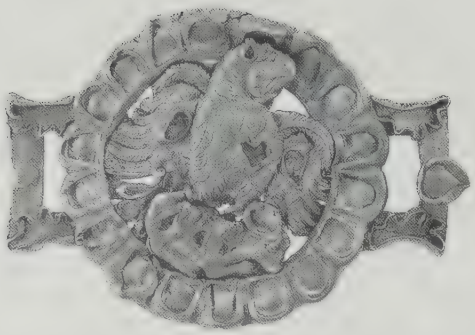
It would be unrealistic to assume that these artistic movements led directly to the splendours of the Achaemenian age, but their traditions became part of its artistic inheritance. Just



6. The Oxus Treasure, Amū Daryā area, Russian Turkistan, 5th/4th century BC; four gold bracelets; gold torc; gold plaque and gold ring. British Museum, London.

as there is no inevitable artistic 'progress' so there is no absolute artistic finality. Achaemenian art was a deliberate amalgam conceived to be appropriate for the majestic imperial image of Cyrus and his successors. According to Plutarch, Alexander was astounded when he entered the tent of Darius and saw the treasure it contained 'all of gold and the finest workmanship'. Jewellery contributed to the pomp and circumstance of courtly splendour, as the frieze of Persepolis reveals (see Chapter 3). The excellence of the technical skill, the balance of attraction and artistry, the brightness of polychrome, the mingling of motifs, the stylistic suffusion which harmonised but did not obscure different artistic traditions, makes Achaemenian jewellery exciting rather than original. It blended and reconciled stylistic differences. Unfortunately, few documented pieces have survived. There is much obscurity over the discovery and provenance of the Oxus Treasure now in the British Museum but its artistry is unmistakable. It is a sumptuous collection of objects illustrating various styles and techniques of art, including gold armlets, bracelets, torques, plaques, roundels, rings, buttons and a variety of adornments (pls. 5 and 6).

A collection of jewellery has been discovered at Susa and dated to 350/331 BC, but a more



7. Gold buckle, embossed and chased of an eagle gripping a young goat with lost turquoise inlay, Nihāwand 1st century BC to 1st century AD. British Museum, London.

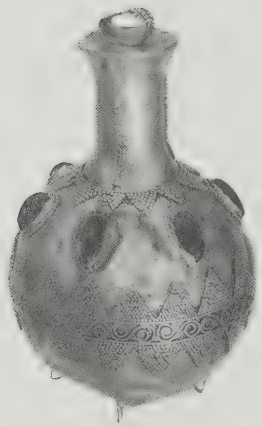
imposing cache, hidden among the ruins of Pasargadae, containing objects dated to 450/350 BC was excavated by David Stronach in 1963. Amongst the items were a pair of delicate gold twisted ibex-headed bracelets, elaborate filigree and granulated earrings, executed in wire mesh decoration, a silver spoon with an elegantly curved duck-head handle, carnelian, amethyst and lapis luzuli beads, miniature gold bells, lotus-shaped spacer beads, small gold animal pendants and plaques, cut stones, a cloisonné gold brooch, pins and bead and pearl necklaces. It constituted a remarkable indication of the possessions of an Achaemenian lady of quality.

Jewellery of the Parthian period was not negligible, but was on a smaller scale, decorative rather than majestic, personal more than public, befitting the pre-eminence of the noble families rather than a great dynasty. Two small objects (from the British Museum) convey an impression of the simpler design which characterised Parthian jewellery. One is an embossed and chased gold buckle (pl. 7), originally inlaid with turquoises and other stones, the other a vase-shaped, gold, granulated and filigree pendant earring, inlaid with garnets (pl. 8). With the revival of Persia under the Sasanians, the arts began to flourish again in the grand style of a great monarchy consciously imitating its predecessors. The society was dominated by the symbolic temporal and spiritual representation of the royal presence, the hunter and protector of his people, magnified by art as in the royal stucco bust from Kish showing the king wearing earrings with large pearls, a necklace of a double string of pearls and a necklace of pearls and plaques (pl. 9 and see Chapter 6). The intricacy of the seals, the quality of the coins, the ornamentation of the crowns, the virtuosity of the silver ware, show the intricate workmanship from the royal and other workshops organised into well differentiated guilds (see Chapter 5).

The court was luxurious. Theophylactus, a Byzantine chronicler, ecstatically described a crown of Hurmizd I:

> The tiara was of gold and ornamented with stones, emanating a dazzling splendour from the encrusted carbuncles, and framed with a row of pearls that glistened against the hair, mingled with the beautiful splendour of the emeralds, so that looking upon it, the eye was almost petrified in an insatiable astonishment.

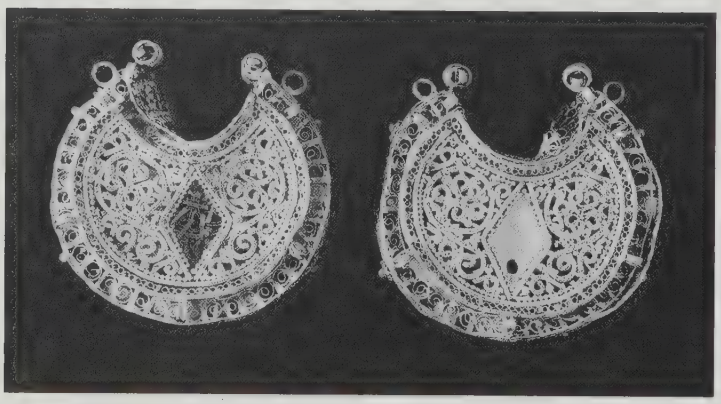
The crown of Khusrau II was even larger and glittered more brightly, whilst his famous carpets were reported by the Arab historian, Thaʿālibī, to be brocaded with gold thread and adorned with pearls and rubies depicting the seasons of the year. Most spectacular of all was Khusrau's throne, the Takht-i-Taqdīs, a marvel of the artistic virtuosity of the Sasanian jeweller. The Sasanian cultural legacy, the constituents of which, like those of Achaemenian art, were not uniquely original, permeated the arts of its neighbours and beyond. It is highly significant that the *Shāh-nāmeh* of Firdausī, the epic poem which provided some of the stimulus for the later arts of illustration following the renaissance of the Iranian consciousness which it helped to encourage, was based upon the age-old stories and ideals of the heroic Sasanian past.

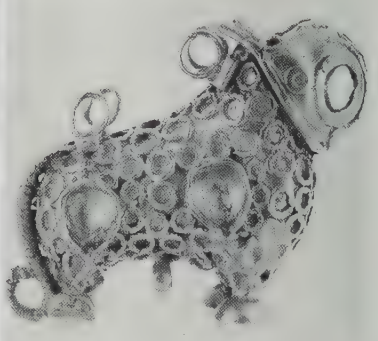


8. Gold vase-shaped pendant from earring, inlaid with garnets and decorated with granulation, 1st–2nd century AD. British Museum, London.

After the collapse of the Sasanian empire the influence of Islam was pervasive. It affected Persian art, but although Persia had lost its political independence it did not surrender its cultural identity. Indeed, the Umayyad caliphs adopted much of the courtly ceremonial of the Sasanians and engaged Persian officials in their service. Thus, in the early periods of Islamic rule many of the Persian motifs and designs remained and the same techniques of craftmanship survived. Religion has little effect on the forge, though it may restrict the wearing of personal adornment. The Qur'ān did not prohibit the wearing of jewellery, 'our servants . . . shall be adorned with bracelets of gold and pearls and their clothing shall be of silk', Sura 35, verse 30. Some of the *ḥadīth*, the prophetic traditions, however, were more







austere enjoining the faithful that: 'If you are fond of the jewellery of Paradise and of clothes of silk, wear them not in this world.'

In practice there was general acceptance of silver and, with reservations, gold, for women but not for men. The treasures of the caliphs, in fact and fiction, contained quantities of jewellery, and many of the minor dynasties had splendid collections. Merchants and officials possessed fine pieces. Yet in spite of the demands for their products the goldsmith was an object of moral suspicion whose trade was controlled according to special laws over the quality and quantity of the metal used. In consequence, as with musical performance, which also did not meet with complete religious approval, the goldsmith's craft was mostly performed by a minority community, usually by Jews.

So, in the first couple of centuries of the Islamic period the repertoire of designs and motifs kept within the classical, Byzantine and Sasanian ornamental traditions. There were crescent-shaped earrings with Sasanian human forms, belt buckles with lions, pins with a frame surrounding a guinea fowl (which appears on Sasanian stucco work) or a depiction of Pegasus (an archetypal Sasanian image), palmettes, rosettes and scrolls. It was not till the 3rd/9th century that an Islamic style developed which tended towards an abstraction of natural shapes. There is relatively little that is positively identifiable till the 5th–7th/11th–13th centuries in Persia, though there is more evidence for Fatimid jewellery. Excavations which took place in Nīshāpūr under the sponsorship of the Metropolitan Museum of Art in New York, yielded datable objects which have enhanced the understanding of early Islamic jewellery. Other excavations were at Rayy and Istakhr. The collection in the L.A. Mayer Museum is a collection of great archaeological value. Identification is often difficult because of the similarity of much Islamic jewellery at this period, but widening experience, technical analysis and historical evidence is providing more understanding of the details.

In the 6th/12th and 7th/13th centuries Persian bracelets were made of gold, silver and bronze, cast or made from sheet metal, open or closed with a clasp, worn on arms or around the ankels. Some were in cable form of twisted wire and there were many different kinds of finials. There were gold earrings made of sheet metal or made into various crescent shapes decorated with filigree (pl. 10), granules, ribbons, scrolls or beads of different designs. Gold necklaces were composed of spherical gold beads interspersed with polished stones, granulated spacers (pl. 11) or geometric motifs. Cylindrical and square amulet cases were popular with domed ends, decorated with wire rosettes and loops and engraved with lettering, scrolls, leaves and natural forms (pl. 12). Others were crescent in shape with variated design. Rings were made of gold, silver or bronze. Some were plain, others were set with stones, garnets, turquoises, carnelians or rubies. Many bore inscriptions for seals or divine protection. A number were decorated with wire patterns or engraved with different motifs of a symbolic significance, arabesques or animal forms (pls. 13–15). Saljūq jewellery was varied in its geometric design but less technically skilled than that of the Fatimids, 'whose combination of filigree embellised with granulation forms a technical feat of skill equalled by few civilisations'.[1] There were many centres of regional wealth with officials of local prestige who commissioned bowls, ewers, candlesticks, censers, manuscripts, miniatures and carpets, who would also have ordered jewellery, most which has, unfortunately, been melted for other uses.

Tīmūr was a notable patron of the arts and the Spanish emissary, Clavijo, visiting the pavilions of the Great Khānum in 806–7/1404 gives a vivid glimpse of the exotic taste for jewellery at the Timurid court, much of it most probably plundered in the course of the great campaigns. Clavijo described silk hangings 'ornamented with spangles of silver plate gilt, each spangle set with an emerald or pearl or other precious stone', the gold flasks, 'ornamented outside with great pearls and emeralds and turquoises, set in the metal,' and

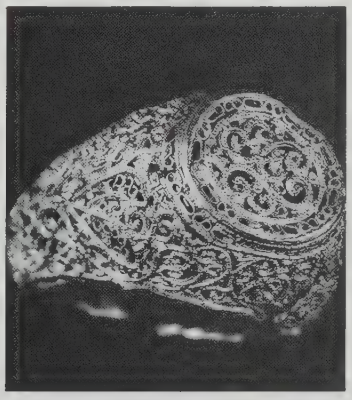


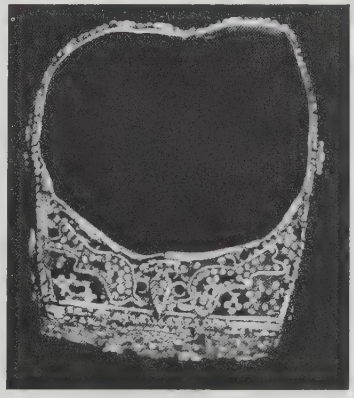
11. Necklace of spherical gold beads and granulated ornament of spaces 6th–7th/12th–13th century. L.A. Mayer Memorial Institute for Islamic Art.

12. Gold amulet case of twisted wire and granulation with figures, 6th–7th/13th century. L.A. Mayer Memorial Institute for Islamic Art.









13–15. Gold openwork scroll patterned oval shaped ring (2 views) and gold ring of square bezel with open bird design. L.A. Mayer Memorial Institute for Islamic Art.

9. (*facing page*) Stucco bust of a King, Kish, Palace II, 5th century, Field Museum of National History, Chicago.

10. (*facing page*) (a) Crescent-shaped gold filigree ear rings, and (b) animal pendant, 6th–7th/12th–13th century. L.A. Mayer Memorial Institute for Islamic Art. (Enlarged)

16. *Nightime in a Palace*, attributed to Mīr Sayyid ʿAlī, from Shāh Ṭāhmasp's Quintet of Nīẓāmī, *c.*000–1540, Fogg Art Museum, Harvard University, Cambridge, Mass.



the doors 'covered with plates of silver gilt ornamented with patterns in blue enamel work, having insets that were very finely made in gold plate'.[2] Clavijo saw too 'flasks made of gold beautifully chased, set with pearls and precious stones'. He noted the headpiece of the Great Khānum ornamented with pearls and a headband of 'a very beautiful garland of pure gold ornamented with great pearls and gems'. He was fascinated by the rich tent furnishings, an idea of which can be gained from the miniature of Mīr Sayyid ʿAlī (see Chapter 9, pl. 16). This ostentatious taste for a profusion of colourful precious stones encrusted on metalwork was a feature also of Safavid and Qājār designs. Indeed, the Timurid and Safavid courts enjoyed similar pleasures of lavish courtly entertainments with gold dishes, goblets and flasks, of campaigning or hunting with splendidly caparisoned horses and superbly worked arms, and open air festivities in all their richly arrayed finery. However, little Tīmurid jewellery has apparently survived.

18. Exhibition of Türkmen jewellery from Kendal Art Museum.

In the absence of well documented examples, Persian painting is a valuable source of information on Safavid jewellery and its display of fashion (see pl. 16 for a varied palace scene and Chapter 13 for other examples). Safavid courtly costume was well decorated with jewellery. The men usually wore turbans often surmounted with a jewelled aigrette or wreathed in strings of pearls. Tavernier mentions one worn by the shāh as being a bonnet with a plume of 'herons feathers fastened with a transparent Jewel'. In the middle of the Jewel was a Pear fashioned Pearl, set with great Topaze's and Rubies. Four chains attached to this jewel were laced through the turban, and into these chains were set diamonds and rubies. The pearls came from the oyster beds near Bahrain. Turquoises, another favourite stone, were controlled by a royal monoply over the mines of Khurāsān. Rubies, diamonds, emeralds and sapphires came from India and Ceylon. There were five or six jewellery shops by the Great Portal at the entrance to the Bazaar in Iṣfahān.

Chardin, who like Tavernier, negotiated with Shāh Sulaymān on jewellery, remarked upon the Persians' habit of wearing rings, writing that they made a 'grande parade de leurs bijoux' and that 'les femmes n'en portent point tant, en nulle aûtre part due monde'.[4] The men also delighted in sporting their rings, usually silver, fifteen or sixteen at a time on the three inner fingers of a hand, with sometimes five or six on a single finger. Besides these rings they carried signet rings in a purse dangling from a chain around their necks. They decorated their headgear with clusters of precious stones, particularly the brightest ones. Women displayed a variety of decorative adornments such as pearl fillets encircling their faces, chaplets of pearls or stones enveloping their tresses, ornamental headdresses, earrings, necklaces, bracelets, clothing attachments, pendants, bangles, armlets, amulets and anklets.

Most Persians were attracted by coloured stones decorating dresses or encrusting festal jugs, ewers, flasks, cups and dishes. The clothes of the men were generally fastened by ornate clasps and buttons. Their belts were decorated with elaborate buckles, their sashes, white or colourfully embroidered with tassels or fringes, frequently held in place a dagger or sword, the hilts of which were emblazoned with jewels or inlaid with gold designs and the scabbards of shagreen were sometimes overlaid with chased gold, silver foil or enamelled. Fashion, however, did change and the painting of 'Alī Qulī Jabbādār in the late 11th/17th century shows a rather wistful couple. The man is dressed in full-skirted *jāmeh* with a



17. *Prince and Princess*, by 'Alī Qulī Jabbādār, later 11th/17th century, British Museum, London.



19. Qājār jewellery.



20. Fatḥ ʿAlī Shāh drawn by Sir Robert Ker Porter, 1817.



narrow sash, wearing a fantastic headgear surmounted by different kinds of feathers set in jewelled clasps and has a string of pearls around his neck (pl. 17). The woman in a décolleté dress is wearing a fur fringed domed hat, a pearl choker, a treble string of pearls, an arm bracelet and pearl bangles on her feet. Rings were generally cast and finely chiselled, floral decoration was a feature, as well as simple geometric designs.

Qājār jewellery was distinctive and has been well documented. Qājār artists also absorbed foreign influences and copied themes and designs in jewellery no less than in the other arts. Sometimes the results were felicitous, but on other occasions, they produced less than attractive artistic hybrids. The collection of the crown jewels provide examples of both. A distinctive feature of the Qājār period is the number of gold pieces brightly enamelled on one side and set with highly coloured stones on the other. Earrings were elaborate and elongated often with linked umbrella shaped pendants, or delicate with hanging beads. Some were crescent-shaped or anthropomorphic in outline and made of twisted filigree. Pendants were round-shield-shaped, tear-drop, bell-like, encrusted with precious stones and had hanging leaves, fish-shaped pendants, twisted gold wire, pearls or other ornamental pieces. They could be decorated on both sides with enamelled figures, birds or floral patterns in bright colours such as ruby-red, sky-blue and deep green (pl. 19). Garments of the royal family and courtiers were frequently embroidered with banks of pearls and stones and dresses were similarly adorned. To these were added pins, buckles, brooches and amulet boxes, which were often gaudy to look at. Even the more spartan Nādir Shāh had arm bracelets (see Chapter 14). Pearls continued to be used in jewellery extensively indicating the continuing fascination for the it within Persian jewellery.

Later Qājār and 20th-century jewellery became imitative and repetitive, drawing unassimilated inspiration from foreign models with little of a genuinely Persian character appearing. European-style dress hardly encouraged the wearing of traditional forms of jewellery. However, at the beginning of the century, a sketch from life of Fatḥ ʿAlī Shāh by Sir Robert Ker Porter shows his elaborate personal adornment of bejewelled crown, bracelets and decorated belt with others accessories such as a tassle and a dagger (pl. 20). Ker Porter described him as 'one blaze of jewels, which literally dazzled the sight on first looking at him'. The crown 'was entirely composed of thickly-set diamonds, pearls, rubies and emeralds, so exquisitely disposed, as to form a mixture of the most beautiful colours, in the brilliant light reflected from its surface .... But for splendour, nothing could exceed the broad bracelets round his arms, and the belt which encircled his waist; they actually blazed like fire, when the rays of the sun met them.'[5]

Another form of Persian jewellery is that worn by tribespeople, who have preserved a vigorous angular style with great strength of expression in a wide range of silver objects. As with carpets, rugs (see Chapter 8) and textiles (see Chapter 9) there are marked regional and tribal variations but the illustration of Türkmen pendants shows a typical simple bold design, set with carnelians, which are believed to have magical properties, and with chains attached from which hang bells and discs. The principal shapes are circular, triangular, rectangular, rhomboid and sometimes hearts. There is richness and variety in this tribal jewellery which is robust as well as pretty, incorporating designs of ageless antiquity. Among the personal ornaments worn by women, often in some quantity and varying according to their social status, are moon-shaped earrings, collars, plaques, bracelets, necklaces, brooches, medallions, anklets, armlets, leaf, fish, pear-or heart-shaped discs dangling from chains, small prayer cylinders, hair clasps and pins and other little decorative pieces of dress adornment. Particularly notable are the chunky, tapered, cylindrical, open bracelets of differing sizes and length, composed of identical bands of engraved and gilded scroll-motifs studded with evenly spaced oval cornelians (pl. 18).

In the jewellery from Kurdistān motifs and shapes were varied. There was extensive use of small sheet-metal fishes to encourage fertility and happiness and other symbols to avert the 'evil eyes' on amulets. Stones were not a conspicuous feature, but small coins and beads were used, suspended from wire spacers. Jewellery from Khurāsān shows Central Asian influence with a greater use of stones, especially of turquoises and the metal was frequently gilded in many shapes with filigree decoration. Thus, tribal jewellery exhibits a great variety of distinctive personal motifs, a feature which has been distinctive in Persian jewellery through the ages.

12 COINS

THE STRIKING OF coins in gold and silver has always been the prerogative of the supreme authority of the state, whether emperor, caliph, king or shāh, a right that is promptly claimed and jealously guarded. Seldom are a nation's coins allowed to be merely a commercial convenience, that is, a measured quantity of precious metal, authenticated by a recognised authority; and seldom is the opportunity missed to make use of coins as political or religious propaganda. In tracing the history of Persia's coins we shall see how those with supreme power chose to represent their authority, to their own people and to neighbouring states, and how at certain periods the coins can rightly be considered as miniature works of art.

Coins illustrated to actual size unless otherwise stated.

ACHAEMENIAN AND PARTHIAN COINS

The institution of the first distinctively Persian coinage is credited to Darius I about 515 BC, and it was as a warrior that he chose to portray himself, either holding his bow or kneeling to draw it. His successors varied this only by substituting a spear or a dagger as the weapons they held. The reverse bears the mark of a rectangular punch, and there is no inscription. The Achaemenian kings retained this basic type both for the gold daric (named after Darius himself) and the silver siglos for nearly two centuries, apparently regarding the advantages of continuity and familiarity of design as of paramount importance (pl. 1).



1. Achaemenian. Gold daric, 5th–4 BC. The king, running, holds bow and spear. Obverse, enlarged × 2.

Alexander's campaigns drew Persia into the Hellenistic world of a silver-based coinage and a system founded on the silver drachm and tetradrachm. When the Parthian kings began to strike coins towards the end of the 3rd century BC they followed the Attic weight standard of about 4.25 g. for their silver drachms. Like the Achaemenians, they maintained virtually a single type (though with some variety to be found on the copper issues) throughout the years of their empire.

Invariably the obverse bears the bust of the ruler, usually facing left. Sometimes decked in elaborate helmet or tiara, sometimes with diadem, the portraits can at their best be superbly realistic. The regalia, too, is often engraved with remarkable precision. But later the portraiture becomes lifeless, and one king is differentiated from another more by the exaggerated rendering of beard or hair, or by the presence or absence of the hereditary carbuncle on the forehead than by the realism of his features (pl. 2).

The reverse type of the Parthian drachm is the seated figure of Arsaces, founder of the dynasty, holding a bow, a figure strongly reminiscent of the Seleucid type of Apollo seated on the omphalos. Surrounding him are lines of Greek inscription, more elaborate yet more bungled as time goes on. The king is not referred to by name, so that there is in some cases considerable uncertainty in attributing the coins to particular reigns. The reverse type of the tetradrachms is not so constant throughout the whole period. Greek deities (Demeter, Heracles) as well as Arsaces appear early in the series; but the usual type, from the reign of Orodes I onwards (*c.*50 BC) is of the king, enthroned, receiving a wreath from a city-goddess.



2. Parthian. Silver drachm of Sinatruces, *c.*77–70 BC. His tiara is ornamented with a horn at the side, and models of seated stags over the crest. The reverse inscription reads, 'Of Arsaces, the Great King, divinely descended, victorious'.

SASANIAN COINS

The debt owed to the Hellenistic world by the forerunners of the Sasanian coinage is clear to see. But Sasanian coins, by contrast, display not just the adaptations that so often mark the transition from one dynasty to another, but a wide variety of wholly original features and a character that is distinctively Persian. Thus we see innovation in the appearance of the metal blanks upon which the dies are impressed. The chunky silver flan of the classical



3. Sasanian. Silver drachm of Bahrām II, AD 276–93, with his wife and son. The king's beard is drawn through a ring, and his crown is winged. The queen and prince wear eagle headdresses. Obverse.



4. Sasanian. Silver drachm of Narses, AD 293–303. His hair is in stiff ringlets, and his simple crown is decorated with three leafy sprays. Obverse.



5. Sasanian. Gold denar of Shāpūr II, AD 309–79. The few gold coins that were struc.. during the Sasanian period were probably for ceremonial or festive occasions.



6. Sasanian. Silver drachm of Shāpūr I, AD 241–72. The obverse inscription names him as 'Worshipper of Mazdā, King of Kings of Iran, descended from the gods'.



7. Sasanian. Silver drachm of Khusrau II, AD 590–628. Obverse.

world is replaced for the first time in the history of coinage by a thin, spread flan that was later to be used universally throughout the Arab world, in the Byzantine empire and in medieval Europe.

The dominating feature of the obverse is the royal portrait bust in profile. At their finest, as on the coins of Shāpūr I, the portraits are superb, with life-like characterisation in the features. The circular area is filled, but not over-full; the crown and regalia are worn with ease and do not overwhelm the figure. But though successful portraiture continues to be found until the fall of the dynasty, it is not invariably so; and there are periods when the features of the face are quite dominated by the crown and the jewellery, when the surrounding inscription encroaches on the head, and the design, for want of a focal point, lacks artistic quality. The distinctive forms of the royal crowns are generally sufficient to allow a coin to be attributed to the appropriate ruler. But another innovative feature, not found on Achaemenian or Parthian coins, is the prominent position of the king's name on the obverse; and Pahlavī is the language of this inscription (pls. 3–6).

The reverse type displays the religious element that is to be a characteristic, *mutatis mutandis*, of the Persian coinage until modern times. The central feature is the Zoroastrian fire-altar, with flames rising from it, usually flanked by two attendants. The identity of these two figures is open to doubt: are they priests, or is one the king in priestly function (for their headgear often appears to be the royal crown)? After intermittent examples which indicate the place of minting from the early 4th century onwards, and frequent occurrences under Bahrām IV in varying positions on the reverse, the mint-monogram becomes a standard feature at the right side (reading downwards) from the reign of Yazdigird I (AD 399–420). About a hundred different monograms are known, but barely half of these can be confidently identified. The indication of the year of issue also becomes a regular feature from AD 499, during the reign of Kubād I. This takes the form of the king's regnal year, written in Pahlavī, down the left side of the reverse area. Historians and archaeologists have good reason to be grateful for this precise recording of place and date of issue, which continued in Persia until coin-production was centralised in modern times.

Yet changes were not introduced simply for the sake of change, nor were commercial considerations sacrificed on doctrinaire grounds, for the silver drachms which formed by far the greatest part of the Sasanian coinage continued to adhere to the Attic weight standard of the Parthian coinage. The long reigns of Khusrau II (AD 590–628) (pl. 7) and Yazdigird III (AD 632–51) had produced coins in abundance, and theirs were the coins in circulation as the Arab conquerors extended the eastern borders of their empire into Persia; theirs too (and especially those of Khusrau) were the coins which with varying degrees of adaptation remained the models for the silver coinage for the rest of the seventh century.

ISLAMIC COINS

An issue from the so-called 'Arab-Sasanian' coinage, from the years *c.*31–80/651–99 differs little at first glance from a late Sasanian coin (pl. 8): the royal portrait on the obverse, with the Pahlavī inscription before the face; and the fire-altar and attendants on the reverse, with Pahlavī mint-monogram and date at right and left. But the characteristic feature of the series is the religious formula in Arabic in the obverse margin: most frequently *bismillāh* ('in the name of Allāh') or *lillāh al-ḥamd* ('to Allāh be the praise'). The name of the Sasanian king, especially in the early part of the period, is sometimes left unchanged. But usually the royal name is replaced by that of an Arab governor, whose name is rendered in Pahlavī. The names of two caliphs, al-Muʿāwiya and ʿAbd al-Malik, and of the rival caliph ʿAbd Allāh b.al-Zubayr also sometimes appear in this incongruous position beside the royal portrait. Each coin is precisely dated, in that its year of issue is given. But to which of the three possible dating systems in use simultaneously at the time, the year belongs, can sometimes be determined only by other considerations. The year of accession of Yazdigird III marks the starting-point for one system, which continued in use until at least fifty years after his death. A second system reckons from the year of Yazdigird's death, and persisted on coins of Ṭabaristan until about 180/796 and even into modern times among Zoroastrian communities in Persia and India. Thirdly the Hijrī system was in use from about the year 40/660.

The mints in which these coins were struck were for the most part established in production during the Sasanian period, and their monograms present similar problems of interpretation. Only a few new mints were required, of which the most productive was at the newly-founded garrison city of Baṣra.

But by the last decade of the 7th century (*c.*70–80) ideas for a reform of the coinage – an Islamicisation of the coinage – were in the air. Experimental issues appeared at various mints

throughout the empire. In the former Byzantine territories the experiments appeared on gold and copper issues, and coins bearing the standing figure of the sword-girt caliph, produced in great numbers in copper and sparsely in gold, date from this period. On the silver coins from the former Sasanian lands some of the experimental types were even more bizarre hybrids than those of the 'Arab-Sasanian' coinage. Al-Ḥajjāj ibn Yūsuf's issues from the Bīshāpūr mint in 76 and 77/695 and 696 (pl. 9) have the 'declaration of faith': 'In the name of Allāh, there is no god but Allāh alone; Muḥammad is the Apostle of Allāh', divided into small groups of letters and arranged clockwise around the edge. Not all experiments appeared on the obverse. An anonymous issue is known where the usual Sasanian reverse is replaced by what has been plausibly interpreted as a depiction of the *miḥrāb* and '*anaza*;[1] and issues of Bishr ibn Marwān, governor of Baṣra and Kūfa, omitting the fire-altar but retaining two attendants, show a figure (? the caliph) with arms upraised in prayer. As the Islamic state moved from a borrowed coinage towards an original one, these experimental types give a tantalising glimpse of a numismatic iconography that might have been.

The reform of the coinage, *c.*77–80/696–9, introduced by the Caliph ʿAbd al-Malik, showed Islam at its most iconoclastic and austere (pl. 10). Gone were the images and symbols of conquered enemies: in their place were religious inscriptions occupying the whole area of the coin save for one margin allotted to recording the year and (on silver) the place of minting. The main (obverse) legend, almost constantly in use until Qājār times, was the 'declaration of faith:' 'There is no god but Allāh alone.' Even the name of the caliph was absent from the gold and silver for what remained of the Umayyad period, and his authority expressed itself only through the words of Islam. Yet his right of *sikka* was hereafter jealously guarded and after the preceding fifty years of what were virtually local coinages it is now chiefly the less highly regarded copper coins that show the governors' names. Just as the language of the coin inscriptions was now invariably Arabic, so the statutory weight of the gold dinar and the silver dirham was now adjusted to conform with an Arab weight system. Dinars were struck exclusively at the caliph's capital for at least another hundred years, and not until about 230/844–5 did gold striking begin at Persian mints. But striking in silver quickly spread from the former Sasanian territories into the western part of the empire and 'reformed' dirhams were struck at more than seventy mints under the Umayyad caliphate. Only in remote Ṭabaristān did the Sasanian type in a half-dirham size persist, at first under the Zoroastrian Ispahbads and later under ʿAbbasid governors until 178/794–5. The uniformity of type that made the dirham acceptable from Spain to the Oxus was perhaps regrettable in that little scope remained for the expression of regional traditions of artistry; but commercially this monetary unity was sound and profitable, and the dirham proved the ideal mode of exchange for both local and foreign trade.

So rapidly was the new coinage accepted, and so popular did it prove that even in times of political upheaval changes to it were remarkably slight. The revolutionary movements in Persia that worked for the overthrow of the Umayyad caliphate issued coins that differ from standard Umayyad types only by the addition of the apt legend 'Say, I ask of thee no reward for this save love of my kin' (Qur. XLII, 22). Nor did any great change in the physical appearance of the coinage mark the establishment of the ʿAbbasid caliphate (pl. 11). But a shorter reverse legend 'Muḥammad is the Apostle of Allāh', at first in three lines, later in a single line, paved the way about twenty years later for the regular appearance of the caliph's name, or that of his heir, or both.

Another development under the ʿAbbasids concerned the striking of gold. So long as this had been confined to the capital city the place of minting was not indicated. But during the 3rd/9th century, dinars minted in Persia and Iraq (and Egypt) begin to appear, with the mint name added to the year of issue in the obverse margin. Rather than reflecting a deliberate decision to relax the caliph's monopoly, this development was more probably in answer to the pressures of a flourishing economy for a more abundant supply of high-denominational coins.

Politically the unity of the empire did not long remain a reality. But the coinage, in its commercial role, was not greatly affected by the political fragmentation of the caliphate that began in the early 3rd/9th century and lasted until the fall of the ʿAbbasid dynasty. The weight standard remained unchanged, and the main religious legends and the name of the caliph appeared as before; only the name of some prince or governor bore witness to the fact that part of the empire had declared its independence from the secular authority of the caliph. The evidence of hoards confirms that coins minted in all quarters of the empire travelled widely and circulated freely together, and that the Muslim world was, in reality as well as in theory, a single economic unit.

The Tahirid, and later the Saffarid and Samanid princes, as well as other dynasts of less importance and more restricted influence struck coins in the various territories under their control, often in great abundance (pl. 12). The coinage of the Samanid princes, for example,



8. Arab-Sasanian. Silver drachm minted at Bīshāpūr, year 47/677–8. The portrait and name in Pahlavī are of Khusrau II, and the Arabic inscription reads 'bismillāh al-malik' ('in the name of Allāh, the king').



9. Arab-Sasanian. Silver drachm of al-Ḥajjāj b. Yūsuf minted at Bīshāpūr, 77/696. The 'declaration of faith' in Arabic frames the bust of Khusrau II. Obverse.



10. Umayyad. Silver dirham minted at Sūq al-Ahvāz, 94/712–13.



11. ʿAbbasid. Silver dirham minted at Junday-Sābūr, 136/753–4.



12. Tahirid. Silver dirham of Ṭalḥa b. Ṭāhir minted at al-Muḥammadiyya (Rayy), (210/825). Beneath the reverse inscription: 'Ṭalḥa'.



13. Saljūq. Gold dinar of Tughril Beg minted at Iṣfahān 446/1054. Bow and arrow above reverse inscription.



14. Mongol Great Khāns. Silver dirham of Chingiz Khān, *c.*618/1220, naming the ʿAbbasid Caliph al-Nāṣir on obverse.



15. Mongol Great Khans. Silver dirham of Töregene, 639–44/1241–6. Obverse.



16. Il-khanid. Silver dirham of Arghun, minted at Tabrīz, (683/284). The first four lines, in Mongolian script which should properly be aligned vertically, read 'Coinage of Arghun, viceroy of the Great Khān'. His name is repeated in Arabic at the bottom. Reverse.



17. Il-khanid. Silver double-dirham of Öljeitü, minted at Āmul, 710/1310–11. In the obverse margin are the names of the twelve Shīʿite Imāms.

18. Safavid. Silver medallic coin or presentation-piece of Sulṭān Ḥusayn, minted at Iṣfahān, 1121/1709. The inscription is the Shīʿite 'declaration of faith': 'There is no god but Allāh, Muḥammad is the Apostle of Allāh, ʿAlī is the friend of Allāh'.

played a dominant role in the trade with northern Europe during the 4th/10th century. Meanwhile from a dwindling number of mint-cities, in east and west alike, came coins struck still in the name of the caliph. But in 334/945 the ʿAbbasid capital Madīnat al-Salām (Baghdad) fell to the Buyids, a Shīʿite family from Persia, and from then until the eclipse of the Saljūq dynasty the caliphs, even from the capital, issued no coinage in their own names alone.

The intricate relationships between the various branches of the Buyid family and the usual practice of naming the contemporary member of the senior branches, especially the current bearer of the title *amīr al-umarā*, in addition to the caliph, resulted in sometimes as many as three, or even four names being accommodated on the coin. Moreover the Buyids exulted in the acquisition of resounding titles – they revived the old Persian title 'Shāhānshāh' on the coinage – and for these too space was found, without clarity and legibility being too greatly impaired.

While the art historian may with good reason regret the monotonous appearance of the Islamic coinages of medieval times and the apparent decrease of concern for well-balanced arrangement and fine epigraphy, the political and economic historian has, in these little objects, an extraordinary wealth of contemporary information.

The Buyids had struck coins, predominantly dirhams, of increasingly irregular weight in over fifty mint-towns. Then a change in the established pattern occurred. After many centuries of prolific silver striking comes a sudden break, so that what has survived of the Saljūq coinage (not always a good guide as to what was struck) is predominantly gold, from a greatly restricted number of mints. At first these dinars still display the extra care customarily devoted to strikings in gold, and their Kufic script is often pleasingly decorated (pl. 13). The bow and arrow that appear above the main inscriptions on the coins of Tughril Beg, Alp Arslān and Malik Shāh from several mints, and other decorative devices under the later Saljūq sulṭāns, add a distinctive character to the series. But later coins were poorly engraved, of wildly irregular weight and sometimes so thin that the impression of one side can be seen on the other.

The death of Sanjar in 552/1157 was followed by an unprecedented interruption in the production of coinage in Persia. For a century and a quarter, until about 680/1281, when production was resumed under the Mongols, no coinage was issued from the hitherto constantly prolific major mints of Persia, Iṣfahan, Rayy, etc. It must be supposed that under the Khwārazm-shāhs, whose own minting activity was confined to their easternmost possessions, and the shortlived local dynasties of the period, the existing coinage circulating in the area had to suffice. Yet even for this supposition we do not have the evidence, for example, of notably worn coins of earlier years. Sadly, numismatics alone is often unable to answer all the questions it poses.

No startling changes mark the appearance on the scene of the coinage of Chingiz Khān (pl. 14), with its conventional acknowledgement of the Caliph al-Nāṣir (575–622/1180–1225), though issues of Töregene, widow of Ögodei, bear a lively depiction of a horseman turning to draw a bow (pl. 15). But under the Il-khāns of Persia the coinage, though still used as an affirmation of authority and to express religious allegiance, at last broke away from the pattern of centuries. Some splendid examples of the coin-engraver's skill date from this period. The coins remain for the most part non-figural, but the old format of main



inscription surrounded by marginal inscription, is, where retained, transformed by a wide variety of decorative patterns, and countless new ways of arranging the inscriptions. Square Kufic and *naskhī* script is used, as well as plain Kufic. The Mongol language and script are introduced, sometimes alongside Arabic (pl. 16). There is a reversion to silver as the chief metal for striking (pl. 17), augmented by some gold and copper. Many of the old mints were revived, and many new ones opened, if only for short periods. Several attempts were made to reform the weight-standard, and a system was introduced using half, double and triple dirhams.

The coinage of the princedoms that succeeded to the Il-khanid lands, the Jalayirids, Muzaffarids, and Sarbadarids, follow Ilkhanid models in style, but are poorer in execution. Attempts at variety are still there, but the artistry has for the most part gone. Under Tīmūr and his successors the coinage becomes again an effective medium for commerce, basing itself on a small silver unit augmented by multiples. Throughout the Timurid period and always thereafter the date is given not in words but in numerals.



19. Safavid. Silver ʿabbāsī of Sulṭān Ḥusayn, minted in Iṣfahān in 1115/1703–4. It bears the couplet, 'Coins struck he by the grace of the Lord of East and West, the Hound of the Prince of the Faithful, Sulṭān Ḥusayn'. Reverse.

SAFAVID AND POST-SAFAVID COINAGE

The establishment of the Safavid dynasty sees a revival of many of the best features of earlier coinages, such as a concern for the maintenance of a high and reliable quality of metal; inscriptions that were both easily legible and aesthetically pleasing; and, within established limits, the maximum of variety in design (pl. 18). Much that was new was introduced. For the first time on the coinage we see inscriptions in the Persian language, which began to be used for the reverse inscriptions under Shāh ʿAbbās I, 996–1038/1588–1629 and the regular appearance soon afterwards of Persian metrical couplets, incorporating the name of the shāh and gracefully phrased compliments to his person and his currency. This follows the practice established by Akbar on the coinage of the Mughal Empire of India – a reflection of the world to the east of the Persian borders. But the fostering of commercial links with the Western world prompted the adjustment of the weight of the standard gold coin – the ashrafi – to that of the Venetian ducat, which was the common trading currency of the Mediterranean world at that time. The standard silver coin became known as the ʿabbāsī (named after Shāh ʿAbbās) (pl. 19) and this name continued in use well into the Qājār period – an interesting parallel to the use of the term *daric* (after Darius) under the Achaemenian kings. Nevertheless, throughout the Safavid and succeeding periods there was a steady tendency for the weight and quality of the coinage to decline, in spite of periodic attempts to halt the process, usually by redefining the coinage system to take account of the actual state of affairs. One of the more successful measures was the introduction by the Nādir Shāh, following his Indian campaign, of gold *muhurs* and silver *rupees* struck on the Indian standard (pl. 20).



20. Afshārī. Silver rupee of Nādir Shāh, minted at Iṣfahān in 1153/1740. Obverse, diameter 25 mm.



21. Qājār. Gold half-tūmān of Fatḥ ʿAlī Shāh, minted at Tabrīz in 1238/1822–3.



22. Pahlavi. Gold pahlavi of Rizā Shāh dated 1304/1926.

While successive governments strove to safeguard a trustworthy currency in gold and silver, the production of copper passed into local hands, and from the mid-11th/17th until the mid-13th/19th centuries copper coins, mainly pictorial, were issued in profusion from more than sixty provincial mint-towns, their short inscriptions making no mention of the reigning monarch.

It was during the reign of the Qājār Fatḥ ʿAlī Shāh (1212–50/1797–1834) that pictorial designs at last started to reappear on the gold and silver coins; we see the mounted shāh, with lance and sabre and at full gallop, from the Zanjān mint (pl. 21); and the shāh, crowned and holding a sabre, seated on a jewelled throne, from the mint of Iṣfahān; and Rizā Shāh is depicted on a gold pahlavi of 1304/1926 (pl. 22). During Muḥammad Shāh's reign we first see the lion and rising sun (pl. 23) (a familiar motif on the coins of the Anatolian Saljūqs, see pl. 24), a type which has persisted until the present day.



23. Anatolian Saljūqs. Silver dirham of Kaykhusrau ibn Kayqubād, minted at Siwās, 637/1239.

Nāṣir al-Dīn Shāh inherited a situation of unfavourable monetary relations with the outside world and a highly unsatisfactory system for the provision of much of the coinage which was controlled by the provincial governors. In 1294/1877 he closed the provincial mints, and in the following year the mint of Tehran, newly-equipped with machinery from Europe, began providing coins in the modern style: since then the type of a lion standing in front of a rising sun has been almost constant on coins of all metals.

This fine design was combined by the Pahlavīs with either a royal portrait or an inscription. Though the low-relief of machine-struck coinage lessens the sculptural effect and detracts somewhat from its liveliness, it continues to be a satisfying design. The crown above it is no doubt a deliberate reminder of the earliest days of the Persian royal coinage.



24. Pahlavi. Cupro-nickel iorials of Muḥammad Rizā Shāh, minted at Tehran, 1335/1957.

13 PAINTING



1. *Head of a Lady*, fragment of a wall-painting on stucco, excavated at Sabz-i Pūshān (Nīshāpūr). 3rd/9th century. Metropolitan Museum of Art, New York. 38.40.248.



2. Ceramic Bowl, painted with a figure of a mounted horseman. Nīshāpūr, 4th/10th century. Private collection.

5. (*facing page*) Glass bottle decorated with a painted and gilded frieze depicting Mongol hunters. Syria, about 720–1320. Metropolitan Museum of Art, New York, 41.150.

INTRODUCTION

A COMPREHENSIVE HISTORY of the art of painting in Persia in the Islamic period has yet to be written. Nevertheless, information concerning the development of this art, and the characteristics of the major schools in which it was produced, continues to accumulate and is now more than sufficient for a history of Persian painting to be undertaken. Were one now to be written, it would almost certainly concern itself with the history of the styles demonstrated by Persian painting; for style, and the changes in it, have been the primary feature by which the historical development of painting in Persia has been charted, in combination with documentation that is not ever so complete as could be wished; while the function and the significance of painting within the society that produced it are questions that have as yet hardly been broached. It is far from clear, for example, that manuscript illustration – the mode in which Persian painting usually survives and by which it is still largely known today – was really always so dominant as it appears to be; or whether mural painting, and the other independent types of painting that survive (or are known from written documents) from certain periods only, were of equal or even greater importance. This chapter is hardly the forum in which to deal with the complex significance and purpose of Persian painting in Persian society over a period of more than 1400 years. Nevertheless, it may be an appropriate forum in which to call attention to certain issues that emerge from even a relatively brief outline of the history of Persian painting as it has so far been established by means of stylistic analyses, by written documentation, and by archaeological recovery. The questions raised may not be answered here – and possibly many of them cannot as yet be answered – but they wait to be addressed. It is not an overstatement to say that without their investigation, the significance of the art of painting within the context of Islamic Persia, let alone in the wider context of Islamic culture in general, may never be fully appreciated. The historical survey that follows, then, is intended to sketch the history of Persian painting by means of the slightly artificial framework of the schools that produced it. It is also intended to illustrate precisely where in the history of this art are engendered fundamental issues that ought to animate the discussion of Persian painting in future years.

PAINTING IN THE EARLIEST PERIODS, TO *c.* 5TH/11TH CENTURY

Very little is known about painting in Persia during the first four centuries of the Islamic period. Textual references attest to its existence and suggest, naturally enough, that pre-Islamic Sasanian traditions of painting as well as those of Soghdia, in Central Asia, had a great impact on the painting of the early centuries of Persia's Islamic era.[1] Such Sasanian painting as would have influenced Islamic Persian painting is at best sketchily known from surviving monuments (see Chapter 5). Fragments of wall-painting found at the site of medieval Nīshāpūr (pl. 1) and at Lashkarī Bāzār, in modern Afghanistan, and the figurative painting on some of the pottery excavated in Nīshāpūr (pl. 2) are the only material evidence of Persian painting from these early centuries. Furthermore, all of these examples appear to be indebted less to Sasanian traditions (at least insofar as these may be discerned through the evidence offered by other media such as rock-reliefs and textiles) than to those of Central Asia. The themes and subjects displayed on the Nīshāpūr pottery have been compared with the mural paintings done in the 6th to 8th centuries in Afrāsiyāb, in Pjanjikent, and Varakshah (Soghdian cities on the Zarafshān River in Transoxiana); while the rows of attendants painted on the walls of the palace at Lashkarī Bāzār have obvious parallels with certain paintings done in the Turfan region of Chinese Turkestan, at Qizil, even further to the east (pl. 3). The paintings unearthed at Sabz-i Pūshān in Nīshāpūr are perhaps the least

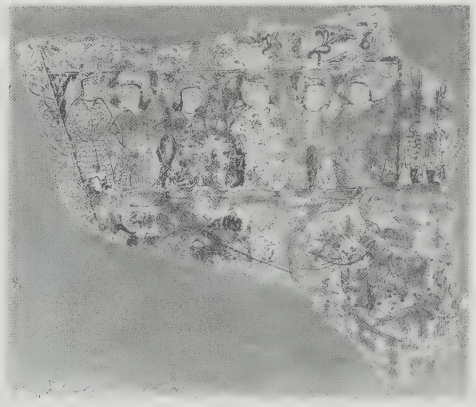
homogeneous in style of all of those early Persian (and related) wall-paintings that survive. They, and the small quantity of painted figural Nīshāpūr pottery whose style is otherwise unique in the Muslim world, are hardly enough to provide a clear idea of the character of painting in Persia in the period before the mid-5th/11th century. Even the few references from written sources – for example, Yāqūt's account of the painted triumphs of Khusrau Anūshīrvān in a castle at Kirmānshāh, records of the extensive library of the Buyids in Rayy that was destroyed in 420/1029 by the Ghaznavids, accounts of the painted walls in the Palace of Maḥmūd of Ghazna and also in a garden-pavilion built in Herat by his son, Masʿūd – cannot convey to us the scale, colours, or style of such painting, let alone its effect.



3. *Head of a Buddhist*, fragment of a wall-painting on stucco, found at Qizil (Chinese Turkestan). 6th–7th century. Metropolitan Museum of Art, New York, 51.942.

PAINTING DURING THE SALJŪQ DOMINATION OF PERSIA

More information has survived about painting in the next period of Persian history, beginning in the middle of the 5th/11th century when the Saljūq Turks established hegemony over Persia. Sources of information increase manifold: fragments of wall-painting (pl. 4) and carved stucco ornaments, masses of over-glaze painted pottery, and a few, precious illustrated manuscripts (pl. 6). Together they provide abundant evidence of the widespread practice of figural painting, although pieces with dates, or datable inscriptions, seem to appear only at the end of the 6th/12th century. Such painted documents, dated or not, nevertheless make clear that however different may have been the functions of Saljūq wall-painting and elaborately decorated pottery vessels and wall-tiles, the unity of conception and style displayed in Persian painting of the Saljūq period is maintained no matter what the scale of the painting happens to be. So unified and so forceful was the Saljūq mode of figural representation that it transcended the geographical limits of Persia and appeared wherever the Saljūqs, or their representatives, ruled (pl. 5). The style is easily recognisable and may be characterised by two salient features: a manner of rendering faces that appears to be traceable to Central Asia, to both Manichaean and Buddhist pictorial traditions – full, round 'moon-faces', tiny mouths, slanting eyes – and a highly graphic style of rendering figures, plants, and summary landscapes that also derives from a tradition that made its earliest appearance in the Turfan region of Central Asia, on religious paraphernalia, in wall-paintings, and in illustrated manuscripts of Manichaean religious texts. Brought westward with the Saljūq rulers, the somewhat stiff figural tradition was both 'codified' and transformed into a fluent instrument of expression that covered large wall-surfaces, curved ceramic vessels, and manuscript pages with equal ease. It is thus highly surprising that with a few notable exceptions, the Saljūq style should have disappeared so thoroughly by the end of the 7th/13th century.

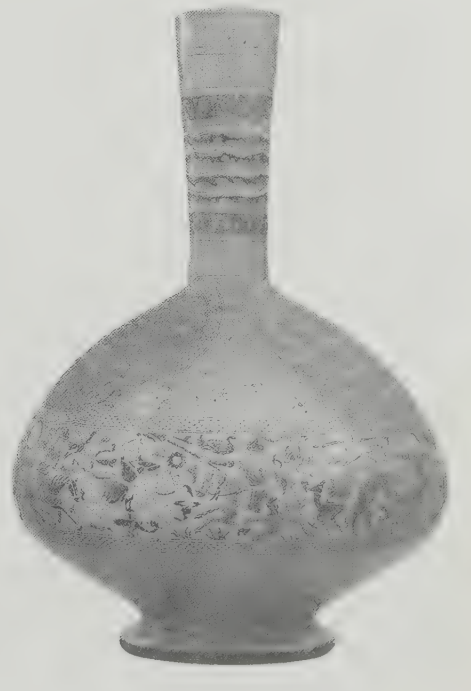


4. *Assembly of Figures*, fragment of a wall-painting on stucco. Persia, 7th/13th century. Metropolitan Museum of Art, New York, 52.20.1.

PAINTING IN THE 8TH/14TH CENTURY UNDER THE IL-KHANIDS AND THEIR SUCCESSORS

Much of the destruction of pre-8th/14th-century Persian material culture was caused by Mongol armies before about 1260. By the third quarter of the century, however, one branch of the Mongols, the Il-Khanids, had established a mobile court in north-western Persia with urban centers in Marāgheh and Tabrīz, adopting all the traditional apparatus of a Muslim court including historians, poets, astronomers, and painters. A number of manuscripts were executed in this quasi-nomadic, quasi-courtly milieu. Enough of them are still extant to provide, for the first time in Persia's Islamic history, the characteristics of a 'school' of Persian painting based on solid evidence rather than by textual references or pre-Islamic analogy. The known Il-Khanid court manuscripts with illustrations include natural histories (pl. 10) and other scientific texts, highly important histories (pl. 11), and at least one copy of Firdausī's great epic poem, the *Shāh-nāmeh*, or *Book of Kings* (pl. 8). The painting in these manuscripts is distinguished by the lack of adherence to a single style of painting. Instead, a variety of styles is to be noted. These include both Persian and non-Persian manners and, on the whole, they bear little resemblance to the Saljūq painting style and none at all to its essential spirit. The characteristics of the Baghdad school of the 7th/13th century, certain mannerisms that may represent local painting traditions of north-western Persia, and the distinctive style of Far Eastern painting and wood-block prints (imported from China during the period of Mongol supremacy, from the middle of the 7th/13th century): all exist side by side and even occur in the same manuscript. These differing tendencies sometimes merge together, as they do in one of the most remarkable manuscripts ever produced in the Muslim world, the so-called 'Demotte', or *Large Shāh-nāmeh* (pl. 8).

The demise of the Il-Khanid family in 736/1335 did not signal the end of the production of fine illustrated manuscripts in their territories. To the contrary, a number of manu-

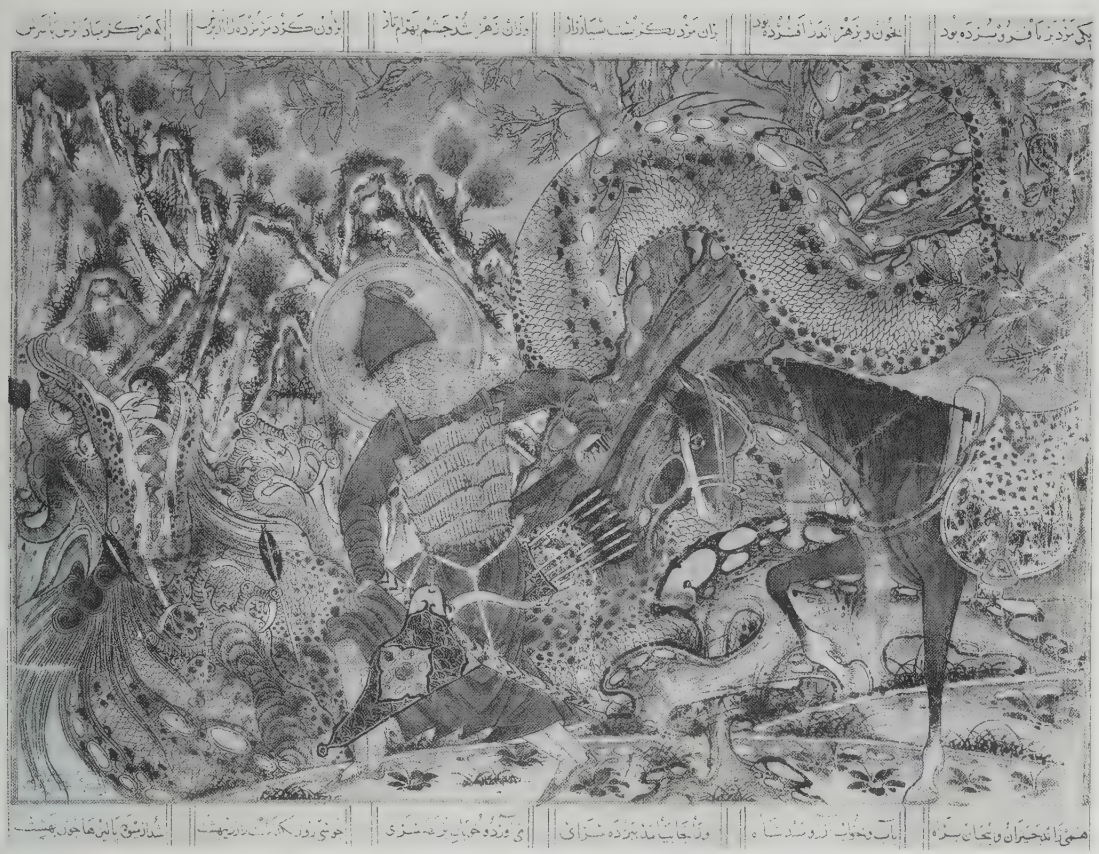




6. *Warqah entering Yemen and conferring with the Wazīr.* From a manuscript of *Warqah and Gulsha* by ʿAyyūqī. Western Persia or Āzarbāījān, 7th/13th century. Topkapı Saray Museum, Istanbul, H. 841, folio 34v.

7. *Zaḥḥāk Enthroned.* Folio 8r of a manuscript of Firdausī's *Shāh-Nāmeh* copied in Shīrāz, 752/1352. Present location unknown.





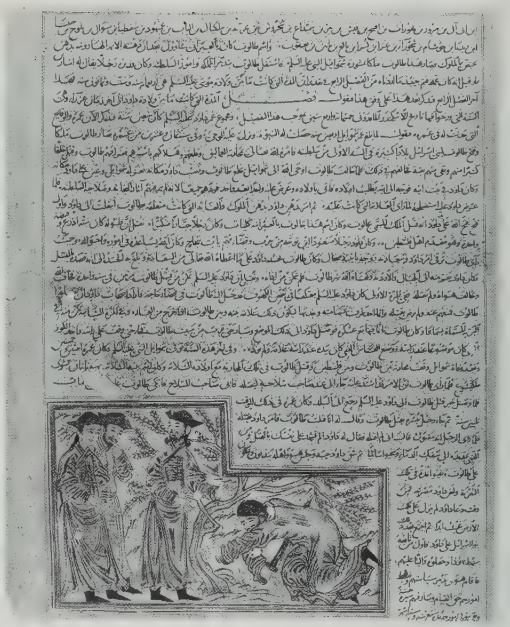
8. *Bahrām Gūr slays the Dragon.* From a dispersed manuscript of Firdausī's *Shāh-Nāmeh*. Tabrīz, around 1335. The Cleveland Museum of Art, Cleveland, 43.658.

9. *The Lion devours the Bull.* From a dispersed and incomplete manuscript of Bidpāī's *Kalīla wa-Dimna*, now mounted in an album of Safavid date. Istanbul University Library, F. 1422, folio 6v.

10. *The Horse*. From a manuscript of Ibn Bakhtishū's *Manāfiʿ al-Ḥayavān*, completed in Marāgheh, 690/1291. The Pierpont Morgan Library, New York, M. 500, folio 21r.

11. *King Saul slays Himself*. From a manuscript of Rashīd al-Dīn's *Jāmiʿ al-Tavārīkh*, copied in a suburb of Tabrīz and completed in 714/1314. Present location unknown, folio 56r.





scripts whose places of manufacture are identified or identifiable, with illustrations in distinctive and differing styles, survive to attest to the continuing activity of provincial centres of painting in mid-8th/14th-century Persia. The volumes copied in the Īnjū ateliers in Shīrāz between about 1330 and 754/1353 are easily recognisable by their predominantly red background and the sketchiness of their drawing. It is surely significant that of the seven Īnjū manuscripts presently known, four are texts of Firdausī's *Shāh-nāmeh* (pl. 7). The same text also gives its name to another 'school' of Persian painting that still remains unlocalised, the '*Small*' *Shāh-nāmeh*s, both smaller and more finely painted than most Īnjū manuscripts. This group, including at least four dismembered texts of the epic and a kind of Persian *Larousse Illustré*, appears to owe the style of its drawing as well as the organisation of its miniatures to Saljūq models. Nevertheless, the exact course of Saljūq influence on any of these paintings is hard to assess because neither the dates of the '*Small*' *Shāh-nāmeh*s nor the locale(s) in which they were copied have as yet been satisfactorily determined.

The true political and artistic heirs of the Mongol Il-Khanids, however, were the Jalayirids, who held power in western Persia and Iraq from the demise of the last Il-Khanids, in 736/1335, to early in the 9th/15th century, ruling from capitals that seem to have alternated between Baghdad and Tabrīz. No precise information concerning the commissions of illustrated books made for the first three Jalayirid princes has yet come to light; and the first manuscript produced under Jalayirid patronage that can be securely dated and localised is a copy of the *Khamseh* of Niẓāmī that was completed in Baghdad in 788/1386, in the reign of Sulṭān Aḥmad. A large number of other paintings, many from manuscripts now dismembered, also survive from this period and remain equally unlocalised and undated because they lack a specific identifying context and because the stylistic and qualitative variations are so very great. Among them are the fragments of a manuscript, a *Kalīla wa-Dimna*, that must rank among the masterpieces of all Persian painting (pl. 9). Stylistic and textual reasons seem to dictate its attribution to the reign of Ahmad's father, Shaykh Uvays (757–761/1356–74). In one of the few widely studied written documents concerning Persian painting, a 10th/16th-century treatise generally entitled, in English, 'On Past and Present Painters',[2] Shaykh Uvays is described as the patron of the artist Shams al-Dīn. This artist is said to have learned his craft from a certain Aḥmad Mūsā, among whose works numbered a *Kalīla wa-Dimna* (the animal fables so popular in both Arabic and Persian illustrated manuscripts surviving from the 7th/13th century onward); and Aḥmad Mūsā is said to have worked earlier for the last of the Il-Khanid rulers, Abū Saʿīd. All of this information suggests that the great tradition of Il-Khanid painting was personally transmitted to younger painters working for the new rulers of parts of western Persia. The practice of painting at Persian courts throughout the 8th/14th century may therefore be seen as continuous and the state of manuscript illustration in the second half of that century as flourishing and extremely productive. Court and provincial schools alike turned out illustrated copies of Persian poetry, animal fables, narrative and historical texts (some of them as yet unidentified), scientific encyclopaedic treatises, and *dīvāns*, or collections of poetry, and in at least one case poetry composed by the ruler himself.

The style of painting in the illustrated manuscripts produced in the Jalayirid court ateliers

of Baghdad and Tabrīz, like that of their erstwhile suzerains, was far from unified. Jalayirid painting ranges from a broad and somewhat crude manner with rather large-scale figures drawn in simple black lines and coloured naively, to the meticulously drawn, subtly shaded and coloured painting that characterises the fragmentary *Kalīla wa-Dimna* noted above (pl. 9), to the refined and highly integrated first synthesis of all of the 8th/14th-century currents of painting represented by the illustrations in a manuscript of the *masnavīs* of Khvājū Kirmānī, produced for Sulṭān Aḥmad in Baghdad and completed in 798/1395–6. This is a key manuscript in many ways, not the least of which is that it contains several paintings signed by the painter Junayd of Baghdad, who is further qualified as the sulṭān's painter, *naqqāsh al-sulṭānī*. Plate 14 is a painting almost certainly taken from this manuscript, attributed to a certain ʿAbd al-Ḥayy, described in the treatise mentioned above as a pupil of Shams al-Dīn. ʿAbd al-Ḥayy's position is unique among 8th/14th-century painters. Textual references to him exist – not only one but two – as well as a painting that is attributed to him, if not actually signed. That the painting is mounted in the very album in which 'On Past and Present Painters' is also preserved lends credence to this attribution. It is tempting, although ultimately unprovable, to suppose that the attribution may have been ordered by the same 10th/16th-century librarian who wrote the treatise, Dust Muḥammad of Herat.

The last important 8th/14th-century provincial school of painting is that of the Muzaffarids, who governed in parts of Iraq but principally in Fārs. The dated manuscripts that may be connected with that city during their reign are important, not only for the distinctive and somewhat mannered style of the figural drawing but for an equally recognisable tradition of fine manuscript-making in Shīrāz, their capital. This tradition can thenceforward be traced in court manuscripts of the following five centuries, and it must have helped significantly to keep the practice of manuscript-copying on a commercial basis alive in Shīrāz in the 10th/16th and 11th/17th centuries. Canons of text-organisation and page-layout, styles of calligraphy and of decorative illumination, seem as important in analysing the 'look' of Muzaffarid manuscripts as are the square miniatures within their wide golden margins. The texts illustrated are usually classical poetry: Firdausī, Niẓāmī, Saʿdī, Amīr Khusrau.



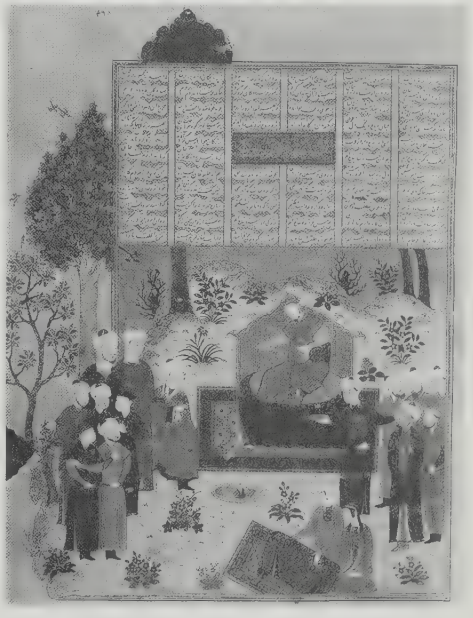
12. *The Prophet Muḥammad, guided by the Angel Gabriel, comes before the Angel with Seventy Heads.* From a manuscript of Mīr Ḥaydar's *Miʿraj-Nāmeh* copied in Herat in 840/1436. Bibliothèque Nationale, Paris, supplément turc 190, folio 32r.

PAINTING IN THE 9TH/15TH CENTURY UNDER THE TIMURIDS

With Tīmūr's conquests of Persia towards the end of the 8th/14th century, political focus, and with it the principal sources of artistic patronage, shifted from western Persia to Samarqand and Khurāsān in the east. Direct contacts between the Jalayirid court school of painters and Tīmūr's capital of Samarqand are documented by the fact that Tīmūr twice took artists from the Jalayirid courts in Tabrīz and Baghdad when he conquered those cities. Dust Muḥammad specifically says that ʿAbd al-Ḥayy was taken to Samarqand, where, 'after his death, all the masters emulated his work'.[3] Other textual references to painting produced for Tīmūr, especially mural painting, help provide a verbal glimpse of the art at the Timurid capital in the last years of the 8th/14th century but unfortunately no painting indisputably connected with this period has survived. Thus, the earliest *documented* chapter of Timurid painting, documented, that is, by a group of stylistically similar paintings in manuscripts, some of which have dedications to specific persons, dates and locales, is comprised of the manuscripts associated with the person of Iskandar. A grandson of Tīmūr, Iskandar was appointed governor, first in Farghāneh (in Transoxiana), and then in western Persia, where from 812/1409–10 he made his capital in Shīrāz. The earliest of the dozen or so manuscripts associated with him (or with his father, ʿUmar Shaykh), is contemporary with the finest of the Jalayirid manuscripts of the last years of the 8th/14th century (e.g. pl. 14); the last is dated in Rabīʿ I 816, or June of 1413, and was copied for Iskandar in Iṣfahān. The style of the illustrations in these manuscripts (pl. 15) represents the first fusion of the finest styles of Jalayirid court painting with Muzaffarid canons of manuscript organisation, and the thematic elements and details which appear to reflect a Central Asian tradition: styles of dress and a manner of rendering facial features, figures of demons and angels, details of landscape and its disposition. These Eastern features appear to derive from a distinctive group of paintings executed on silk or on heavy paper. They lack any concrete identifying documentation but may be connected, on stylistic and historical grounds, with the painting produced, (or at least in circulation) at Tīmūr's court in Samarqand. Iskandar's career as a political figure ended ignominiously in 817/1414 with the blinding ordered by his uncle Shāh Rukh, but the artistic legacy of this princely bibliophile can be traced well into the 9th/15th century in both court and provincial milieux. It represents, in sum, the first fully developed version of the classical manner of Persian painting, to which varying styles throughout the next three centuries and more firmly adhere.

Tīmūr's son and heir, Shāh Rukh, assumed control of the Timurid empire within two years of his father's death and moved the capital from Samarqand to Herat, whence he ruled

13. *Yazdigird offers a Robe of Honour to the Arab Emir Mundhir.* From a manuscript of Firdausī's *Shāh-Nāmeh* copied for Bāysunqur ibn Shāh Rukh ibn Tīmūr in Herat, 833/1430. Gulistān Palace Library, Tehran, page 498.





14. *The Sleeping Prince*. Painting attributed to ʿAbd al-Ḥayy and mounted in an album of about 947–1540 compiled for Bahram Mirza Safavi. (Once possibly part of a manuscript of the *Masnavīs* of Khvājū Kirmānī now in the British Library, Or. 18113, completed in Baghdad in 798/1395–6). Topkapı Saray Museum, Istanbul, H.2160, folio 20v.

15. *Iskandar visits the Hermit at Night*. From Niẓāmī's *Iskandar-Nameh* in a manuscript of miscellaneous Persian and Arabic texts dedicated to Iskandar ibn ʿUmar Shaykh ibn Tīmūr. Copied in Shīrāz in 813–14/1410–11. British Library, London, Add. 26261, folio 230r.



for nearly half a century. In the pattern that would be emulated by every Timurid governor or ruling prince, Shāh Rukh patronised a school of manuscript illustrators. They were kept occupied illustrating the texts that he particularly favoured, historical works based on the famous 8th/14th-century histories of Rashīd al-Dīn that had been recast and brought up to date by his court historian, Ḥāfiẓ-i Abrū. In line with the tendency at both the Il-Khanid and Jalayirid courts, the style of the illustrations in the manuscripts commissioned by Shāh Rukh was diverse. In two of the undated historical texts, pictorial echoes of the suave figural drawing and strong primary colours of Iskandar may be clearly noted (pl. 16). At the same time, particularly in manuscripts with many pictures, the miniatures are almost archaic in style and have been simplified to the point of becoming formulas, repeated *ad infinitum*. One very beautiful copy of the poems of Niẓāmī is painted with the delicacy and refinement of the manuscripts associated with Shāh Rukh's fifth son Bāysunqur; while a highly important, and apparently unique, illustrated copy of the *Miʿrāj-nāmeh*, completed before about 839/1435, presents dramatic images in which the best of the large-figure style of Shāh Rukh's historical manuscripts is infused with strong Central Asian, Buddhist overtones (pl. 12).

The most notable bibliophile in a family of bibliophiles, however, was Bāysunqur. This prince had been entrusted with the governorship of Tabrīz in 823/1420. He was later made governor for his father in Herat, whence he transported his atelier of artists, calligraphers, gilders, and bookbinders. Under the prince's orders, these craftsmen created a number of exquisite volumes that must rank among the finest examples of the art of the Muslim East. The painted illustrations in Bāysunqur's beautifully calligraphed and bound volumes represent the ultimate step in a development that had begun in the last quarter of the previous century. They demonstrate a perfect balance of scale, composition, and colour, in which the human figure is perfectly integrated into its architectural or landscape setting (pl. 13) with a serenity of line and colour and form that comes as close to the rendering of a perfect world as any Persian painter had yet – or ever was – to achieve. It might at the same time be said that this perfection was attained at the cost of the charm and energy characteristic of the painting of Iskandar, for example, so coldly perfect and lifeless, so truly academic, has it become in certain pictures. Yet a certain loftiness of intention permeates all of the best ensembles, of which the supreme example is the celebrated copy of the *Shāh-nameh* completed in 833/1430 (pl. 13). In *Yazdigird Offers a Robe of Honour to the Arab ruler Mundhir*, the shāh occupies the apex of the figural composition, with the jewelled finial of his crown placed at the precise vertical centre of the picture within its rulings. His throne is placed slightly off centre of the entire composition, and to the right, set on an emphatically right-angled object, the rug, that spatially links the two flanking groups, the clump of Persian attendants on the right and the Arab emir's suite on the left. Subtleties abound: the blank space between the Arab emir and the shāh; the unequal weighting of the two groups in number of figures; the extension of the group of Arabs, and some verdant foliage, beyond the vertical picture-rulings to the left and above. The female attendants presenting the robe in the foreground, sitting on the rug, form an emphatic rectangle pulling the eye back into the picture from the left; but downward, away from the triangle created by the shāh and the two flanking groups. The figures seem quite large and substantial for Timurid painting, but their faces are, by contrast, neutral in expression. Indeed, as in virtually all Persian painting, expression is not communicated by the face but by grouping and placement, and by rhythmic colour repetitions, and only secondarily by gestures. These are quite restrained in the Timurid period, as may be appreciated by the compact vertical silhouettes of the personages.

The peculiarly academic quality of Bāysunqur painting, however, may also be seen here: in the calligraphic repetition of the bearded faces, with only minor variations of beard and moustache, and colouring; in the relentless rhythmic repetition of the clumps of red flowers and smaller grass-tufts over the sandy landscape; and in the emphatically vertical trees and marginal foliage, and figures. The slightly over-rich colour harmonies, a saturated purple overriding the palette of strong primary colours under a shimmering gold sky, accentuate this quality, as does the cold perfection of draughtsmanship, revealed by the surface polish and finish that leaves the sensation of perfect balance in the absence of energising tension.

Three brothers of Bāysunqur have also left their names on the bibliophile arts of this period: Ulūgh Begḥ in Samarqand; Muḥammad Jūkī, who governed variously in Transoxiana, in the district south of Herat, and in Khurāsān; and Ibrāhīm-Sulṭān, governor in Shīrāz from 817/1414 to his death in 838/1435. The illustrations made for the manuscripts commissioned by the latter prince again demonstrate a forceful and unified version of a slightly mannered provincial style at its best, seen perhaps to most advantage in the impressive ilustrations to his own *Shāh-nāmeh* of about 838/1435, or in his copy of the *Ẓafar-nāmeh*, the first illustrated version of a panegyric history of his grandfather, Tīmūr (pl. 17).

Parallel to the bibliophile activities of Shāh Rukh and his sons, which (with the notable exception of Ibrāhīm-Sulṭān and his son ʿAbdallāh) were concentrated in Khurāsān and Transoxiana, the rulers of the rival Türkmen confederation, with its centres of power in western Persia and in Baghdad, were also patrons of fine illustrated manuscripts. The scale





16. *The Angel provides a Ram for Abraham to sacrifice instead of his son, Isaac.* From a manuscript of collected histories made for Shah Rukh ibn Timur in Herat around 830/1427. Topkapı Saray Museum, Istanbul. B.282, folio 35v.



17. *The Emir Shaykh Nūr al-Dīn Kills a Lion, hunting after his return from the Indian Campaign in 801/1399.* From a dispersed manuscript of the *Ẓafar-Nāmeh* of Sharaf al-Dīn ʿAlī Yazdī, copied for Ibrāhīm-Sulṭān ibn Shāh Rukh ibn Tīmūr. Shiraz, 839/1436. Present location unknown.

18. *Bahrām Gūr in the yellow Pavilion.* From a manuscript of Niẓāmī's *Khamsch*, copied in Tabriz in 880–6/1475–81. Topkapı Saray Museum, Istanbul. H. 762 folio 177v.

of their patronage has only been recognised in the last twenty-five years, for the illustrations in the manuscripts executed at their behest are so closely based on the Timurid court style of Herat that for a number of decades these paintings were treated as aberrant Timurid manifestations. A series of at least thirty illustrated manuscripts produced for princes of both the Qara Qoyunlu and the Aq Qoyunlu tribes may now be taken as evidence of the substantial activity of the Türkmen princes in this endeavour, especially the Qara Qoyunlu Pīr Budāq, who governed in Shīrāz and then in Baghdad (pl. 18). The Türkmen court style, however, is also important in the history of Persian painting for a more significant reason. It represents the first instance of the adoption of the Timurid court style of painting *after* its period of development (throughout the Jalayirid period) and refinement (through the joint activities of Shāh Rukh and his sons and nephews), when Timurid court painting had attained the status of a truly classical mode of expression. It had become an instrument that was to serve all of the later, distinctive schools of eastern Muslim painting for at least the next 150 years as a foundation, not only that of the Türkmen in Persia, but also the Safavids of the 10th and 11th/16th and 17th centuries, the Ottoman Turks from the 9th–11th/15th–17th centuries, the Mughals in India, the Uzbeks in Bukhārā, and even the Mamlūks in Egypt in the 9th/15th and the early 10th/16th centuries. When, in the second half of the 9th/15th century, the Türkmen confederation finally ousted the Timurids from Shīrāz, their last stronghold in western Persia, Shīrāz workshops continued to turn out manuscripts in a kind of 'utility' style based on both the Timurid and the Türkmen court traditions, retaining at the same time a strong undercurrent of local Shīrāz tradition. This last style, too, may be noted in the painting of a number of the petty courts of India during the 9th–10th/15th–16th centuries, in western India, in Gujarat, and also in the Deccan.

When Tīmūr's great-great-grandson Ḥusayn Bāyqarā took power in the Timurid ancestral capital of Herat in 872/1468, the last brilliant period of Timurid culture may be said to have been inaugurated. Poetry and literature, architecture and gardens flourished anew. No less active were the painters of mural decoration for the new or refurbished buildings and those who illustrated manuscripts. Sulṭān Ḥusayn had anticipated his recovery of Herat by the commissioning of an illustrated copy of the *Ẓafar-nāmeh*, that panegyric history of his ancestor. The manuscript is lent an even greater appropriateness by the fact that all but half of one of the six pairs of illustrations are traditionally assigned to the hand of the Persian painter whose name was to be exalted above all others in the later history of this art, Kamāl al-Dīn Bihzād. His name is virtually synonymous with the finest examples of Persian manuscript illustration. Notwithstanding Bihzād's reknown, other gifted artists, whose names are also known, worked alongside Bihzād in the ateliers of Sulṭān Ḥusayn and his son Badīʿ al-Zamān, and in the libraries of other nobles, of whom the best known is Sulṭān Ḥusayn's vizier, the poet and man of letters, Mīr ʿAlī Shīr Navā'ī (pl. 19).

19. *Sages conversing at Night*. From a manuscript of the *Dīvān of Mīr* ʿAlī Shīr Navā'ī dedicated to Badīʿ al-Zamān Mīrzā ibn Ḥusayn Bāyqarā. Copied in Herat in 890/1485. Between the columns of text at the upper right is a 'signature': *al-ʿabd qāsim ʿalī*, 'the slave Qāsim ʿAlī'. Bodleian Library, Oxford, MS Elliot 339, folio 95v.



Herein lies the crux of an issue that has dominated much of the literature on Persian painting. Can the work of Bihzād actually be distinguished on stylistic grounds, and by the presence of his signature minutely written in highly inconspicuous places, from that of Mīrak, from that of Qāsim ʿAlī, from that of Ḥājjī Muḥammad *naqqāsh*? Or is Bihzād only a *primus inter pares*, whose work adhered to the accepted canons particularly well and who, apart from his enshrinement, replacing the legendary Mani as the ultimate standard of painterly achievement, is praised by contemporary sources in terms that are hardly more extravagant than those used for his painter-colleagues? It must be admitted that, on close examination of the painting that survives from later 9th/15th-century Herat workshops, the biographical accounts of the artists of this period (at least those that have been studied so far) are not particularly enlightening:

> the marvel of the age, the model of painters and paragon of gilders, Master Kamāl ad-Dīn Bihzād (who by his painting brush has put Mānī to shame and by his limner's pencil has abashed the pages of Artang . . . [4]

> Kamāl al-Dīn Bihzād, the best of the modern painters and chief of illuminators and writers, zenith of the age . . . [5]

> Bihzād. As a painter he is a master, though he does not come up to (a previously mentioned painter) in declicacy of touch, but his brush is firmer and he surpasses . . . in his preliminary sketches and his grouping of his figures.[6]

> Ustād Kamāl ad-Dīn Bihzād. He sets before us marvellous forms and rarities of art; his draughtsmanship, which is like the brush of Mānī, has caused the memorials of all the painters of the world to be obliterated . . . . A hair of his brush, through its mastery, has given life to the lifeless form . . .[7]

This last is the historian Khvāndamīr, writing in about 1528. He is equally extravagant in

his praise of Bihzād's contemporaries, Qāsim ʿAlī and Maulānā Mīrak Naqqāsh. The Chaghatai prince, Muḥammad Ḥaydar Dughlāt, also mentions these artists, in somewhat more balanced prose. Compare the following:

> Qāsim ʿAlī, countenance-painter. He is a pupil of Bihzād and his works come near to those of Bihzād but in this style any expert connoisseur can recognise that the works of Qāsim ʿAlī are rougher than those of Bihzād and that his original designs are more unsymmetrical.[8] 'Maulānā Mīrak Naqqāsh. His is one of the marvels of the age, and he is the master of Bihzād. His original designs are more mature . . . though his finish is not equal to that of Bihzād.'[9]

Other contemporary sources reveal little more information apart from painters' names, and dates and places that sometimes conflict. They do not afford more than glimpses of the criteria by which connoisseurs of the late 9th/15th century judged the painting they admired and helped to bring into existence by their very patronage. The considerable body of manuscript painting that does survive from this period instead suggests that Bihzād and his contemporaries *together* refined the classical Timurid style of the mid-9th/15th century, achieving in certain examples a naturalism, an ease of expression and psychological verity, and investing other paintings with a mystical lyricism. All of these achievements were expressed, however, in the same terms of balance of line and scale and rhythmic colour-harmonies, of integrated settings and personages, that had already been perfected in Bāysunqur's ateliers in the same city fifty years earlier. Bihzād and his colleagues did not really effect any startling innovations in style, intent or conception, and they accepted the preference of the princes and nobles for figural painting, and the miniature. There was no major shift in the nature of the texts that were illustrated by this active and talented group of painters, except that a certain taste for the writers of mystical or of Ṣufī literature, especially for Saʿdī and Jāmī, is to be remarked among the surviving manuscripts of the period. A few paintings, such as one in the celebrated *Bustān* of Saʿdī (pl. 20) made for Sulṭān Ḥusayn Bāyqarā, may well demonstrate how Bihzād, at his very best, used the classical Herat style to extraordinary effect. But in general, it is difficult to be certain, even with paintings signed in an acceptable manner, that this name does not really stand for the director of an ensemble, the creator of a pictorial conception that was expressed in a classical vocabulary and was executed in conjunction with a team of artists and craftsmen, resulting in an atelier picture despite the signature. The extent to which this might always have been or not been true of Persian painting will elicit some comment at the end of this chapter.

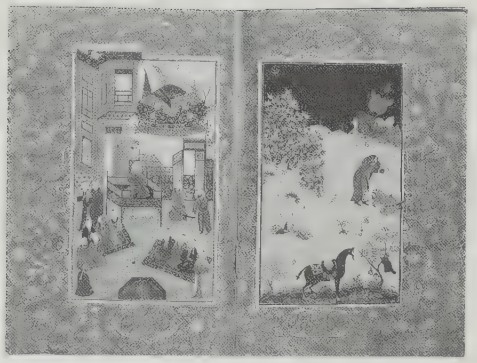


20. *Musical Entertainment at the Court of Sulṭān Ḥusayn Bāyqarā*. Left half of a double-page frontispiece of a manuscript of Saʿdī's *Bustān* copied in Herat for Sulṭān Ḥusayn Bāyqarā and completed in 893/1488. Egyptian National Library, Cairo, Adab Farsi 22, folio 2r.

PAINTING IN 10TH/16TH-CENTURY BUKHĀRĀ

Already in the later Timurid period, but even more so in the four following centuries, the material at hand for the study of Persian painting begins to constitute an *embarras de richesse*, so abundant are the number of surviving illustrated manuscripts and individual paintings and drawings, and so much more common is it that paintings are signed, or contemporary written references made to them. It has thus been possible, in the past decades, to establish the existence, the chronological range, and the styles of a number of provincial schools of Persian painting that flourished in the 10th–11th/16th–17th centuries alongside the court schools of Tabrīz, Qazvīn, and Iṣfahān. Moreover, a long-standing bias against the aesthetic validity of the later schools has disappeared and later Safavid, Zand, and Qājār painting is now being studied methodically and has taken its rightful place in the history of painting, as Chapter 14 attests.

Fine painting in 10th/16th-century Central Asia, essentially in Bukhārā, owes its existence to the usual pattern of political takeover and subsequent change in patron: the Uzbek Khān, Shaybānī, conquered Herat in 913/1507 after having taken Bukhārā in 905/1500. The earliest datable paintings by Bukhārā artists do not occur before the beginning of the second decade of the 10th/16th century, rather provincial illustrations in a *Fatḥnāmeh* made for Shaybānī Khān that is evidently modelled after Sulṭān Ḥusayn's *Ẓafarnāmeh*. As well as in content, the sources of the Bukhārā style also lie in Herat painting, in the transfer of artists, gilders and scribes from Herat to Bukhārā. This is revealed by a series of manuscripts with somewhat complex histories. A number of fine volumes, usually of poetry, had been copied in late 9th/15th-century Herat by celebrated scribes for princely and noble patrons; they were only partially illustrated there and were carried to Bukhārā early in the 10th/16th century either as booty or along with the contents of whole ateliers. These were completed, some as many as five decades after they had been planned and the texts copied. Others remained incomplete even in Bukhārā and were ultimately finished and illustrated in the later 10th/16th century in the ateliers of the Mughal Emperor Akbar in India.



21. *A Prince on a Throne*, and *A Prince kissing the Feet of a Holy Man*. From a manuscript of Sa'dī's *Bustān*, copied by a scribe from Herat (*al-haravī*) for the Shaybanid governor of Bukhārā, 'Abd al-Azīz. Bukhārā, 949/1542. Gulbenkian Museum, Lisbon, LA 123, folios 296r–97r.

Painting in 10th/16th-century Bukhārā completely preserves many Herat compositions, reproducing Herati figures in their late 9th/15th-century costumes almost intact (p. 21), and retaining Herati scale and colouring only slightly less faithfully. For all of these reasons, Bukhārā painting is often characterised as a school that, deprived of new influences, began to wither on the artistic vine and became simple, sterile, and repetitive. This may be so of the less fine paintings and certainly for some of the very late Bukhārā-illustrated manuscripts, but it is not really a fair assessment of the complete Bukhārā achievement, especially since Bukhārā lay close to the source of mineral pigments in Transoxiana. Thus, the quality of the materials, as well as the level of execution of the artists who worked on manuscripts for the most active patrons of Bukhārā, expecially Abu'l-Ghāzī 'Ubaydallāh ibn Maḥmūd (940–6/1534–9), were often both extremely high.

PAINTING IN THE 10TH/16TH CENTURY UNDER THE SAFAVIDS

Nevertheless, Bukhārā painting remains a provincial manifestation of the court, classical, or metropolitan style of Persian painting. This may be seen by comparing the gold-stencilled margins of the Bukhārā *Bahāristān* of Jāmī (pl. 21) with the vivid, freely-drawn animal scenes executed in varying shades of gold on the cream-coloured margins of the manuscript that is generally considered to be one of the finest of all Persian manuscripts, the *Khamseh* of Niẓāmī which was prepared between 945–9/1539–43 in Tabrīz for the second ruler of the Safavid dynasty (pl. 23). Gazing on the large, brilliantly coloured, elaborate paintings of this manuscript, with their scintillating court scenes or their lyrical countryside visions, is to experience the pinnacle of achievement of all the arts of the Persian manuscript, binding and gilding and paper-making, as well as the art of the scribe and the painter. This marvellous manuscript, as with the Bukhārā *Bahāristān*, is solidly grounded in the traditions and the practices of later Herati artists and craftsmen. Among these was Bihzād, although whether Bihzād stayed in Herat during the Uzbeks and Safavid takeovers, or whether he actually went to Bukhārā in 913/1507, when the Uzbeks conquered that city, has not yet been firmly established. Until 928/1522 his whereabouts are not certain, but in that year, Shāh Ismā'īl, founder of the Safavid dynasty, appointed Bihzād director of the Royal Library in Tabrīz. His presence is certainly not to be discerned there before about 926/1520, judging by the best of the Safavid manuscripts of the first thirty years of the 10th/16th century, which, with their dry and sparsely figured illustrations to small books of poetry, appear to constitute the Tabrīz ateliers' output of those years. To the untutored eye, only the distinctive tall red Safavid *kulāh* in the shape of a baton, with the large Safavid turban twisted twelve times around it, indicates the early Safavid provenance of such paintings. This is compounded by the fact that some compositions were copied exactly from late Herat painting, in particular from those Herat manuscripts that had been brought to Tabrīz in the wake of the Safavid conquest of Herat. Any distinctive or telling Safavid features are thus missing.

22. *Haftwad and the Worm*. From a manuscript of Firdausī's *Shāh-Nāmeh*, copied in Tabrīz for Shāh Ṭahmāsp between about 926–48/1520 to 1540. Manuscript dispersed, present whereabouts of this miniature unknown.



23. *Khusrau sees Shīrīn Bathing*. From a manuscript of Niẓāmī's *Khamseh*, copied in Tabrīz for Shāh Ṭahmāsp Ṣafavī between 945/1539 and 949/1543. The British Library, London, Or. 2265, folio 53r.

The artistic climate of Tabrīz at the accession of the second Safavid shāh Ṭahmāsp was, for a while at least, a second golden age of manuscript-making. As a prince, Ṭahmāsp is supposed to have evinced a passionate interest in painting and in the arts of the book and is said to have been taught painting by the Türkmen master, Sulṭān-Muḥammad. A true *floraison* of illustrated manuscripts in Safavid Persia is the result, even before Ṭahmāsp assumed the throne in 930/1524, and it was supported not only by his own patronage of artists and craftsmen but by that of his younger brother, Bahrām Mīrzā, for whom the album with Dust Muḥammad's treatise was assembled. The two stellar manuscripts of Ṭahmāsp's library are the *Khamseh* of Niẓāmī, discussed above (pl. 23) and a slightly earlier *Shāh-nāmeh*, illustrated with more than 250 miniatures of great size (pl. 22). It was executed for the shāh over a long period of time but only one date, 934/1527–8, attests to the period during which a small army of the shāh's craftsmen and artists must have been employed. Together with the *Khamseh* of 945–9/1539–43, it represents the apogee of the art of the Muslim book, with its elaborateness of composition and range of palette, its size and scale of composition and the quality and richness of its pigments and gold. The fact that a great many of the *Shāh-nāmeh* miniatures are the rather bland and mechanical products of an enormous studio should not obscure the fact that others, especially in the early sections of the epic, are of a splendour seldom seen before or since. Among the finest is the celebrated *The Court of Gayūmarth*, before which 'the hearts of the boldest of painters were grieved, and they hung their heads in shame'.[10] It is one of the most breath-taking Persian pictures ever painted, the work of the artist Sulṭān-Muḥammad and one of the best examples of that whimsical and colouristically audacious Türkmen element in the otherwise brilliant, if academic, splendour of Safavid painting in the first half of the 10th/16th century.

The Tahmasp *Court of Gayūmarth* lay very close to the beginning of what was, until the


لب گلنار و بالای سپیدار و سپهری
و آب نیلگون چون گل نشسته
پسرین فربیانش همچو غروی
پرند نیلگون تا ناف بسته



late 1960s, the finest known complete Persian manuscript, an extraordinary example of the manuscript-maker's art still intact and untarnished. Impassioned criticism from many quarters greeted the dismembering and scattering of a document of such value and of such intrinsic beauty, for not only was the complete ensemble destroyed but with it, the possibility of studying and recording the subtle, mathematical, rhythmic interrelationships in the art of the Persian manuscript that have only recently begun to be addressed.[11]

In the third quarter of the 10th/16th century, the history of Persian painting is inextricably connected with the growing puritanism of Shāh Ṭahmāsp, who ceased to patronise artists concerned with the production of fine manuscripts. One immediate consequence was the emigration to other lands, especially to India, of many of Persia's most talented artists, poets, and craftsmen. In the second half of the century, a nephew of the shāh, Ibrāhīm Mīrzā, had an active atelier in Mashhad, far to the east of Tabrīz and its puritanical court. Qazvīn, however, became the centre of the next school of Persian painting, even though the next period of royal patronage did not occur until over a quarter of a century after the court had moved there, in 955/1548. The output of this second Safavid metropolitan school of painting is relatively modest: a few royal volumes from the period of Shāh Ismā'īl II (984–5/1576–7), most of which are now dismembered, a larger number of more modest but charming volumes, and many separate paintings and drawings, some still mounted in the albums in which they were originally placed. The finest manuscript of the period is undoubtedly the *Haft Aurang* of Jāmī that was copied for Ibrāhīm Mīrzā in Mashhad, between 963–72/1555–65 (pl. 24).

These independent images (pls. 25–27) deserve a brief discussion. Whether as a single picture of an idealised personage or as a portrait-like rendition identified with a short note, whether as sketches or as working studies, the independent picture that was never intended









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24. *Zulaykhā, travelling by Camel, arrives in Egypt.* From a manuscript of Jāmī's *Haft Aurang*, copied in Mashhad for Ibrāhīm Mīrzā Ṣafavī between 963 and 972/1556 and 1562. Freer Gallery of Art, Washington D.C., 46.12, folio 100v.

25. *Young Prince with a Falcon.* Qazvīn between about 969 to 988/1560 to 1580. Now mounted on an album-leaf with two *bayts* of poetry, the borders of coloured paper sprinkled with gold and enhanced with drawings of foliage and rocks executed freehand in gold. Topkapı Saray Museum, Istanbul, H. 2140, folio 5r.

26. Album-leaf composed of two single figures and two calligraphic samples. Top: *Seated Youth leaning on a Cushion*, Iṣfahān, around 1019–1610. Bottom: *A Russian in a Fur Cap*, Iṣfahān, 1036 to 1062/1625 to 1650. Leaf bordered with poetry and gold-stencilled floral arabesques, mounted on stencilled coloured paper. Topkapı Saray Museum, Istanbul, H. 2155, folio 20r.

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27. Part of an album-leaf with a drawing framed by *bayts* of poetry and mounted on marbled paper. *Youth and Maiden in Landscape*, Iṣfahān, about 1045 to 1062/1635 to 1650. Compare the lower frieze of paintings in plate 33 for a similar subject. Topkapı Saray Museum, Istanbul, H. 2155, folio 31r.

28. *The Concourse of the Birds.* From a manuscript of ʿAṭṭar's *Manṭiq al-Ṭayr*, added to a 9th/15th-century manuscript, sometime before 1609 and mounted on gold sprinkled dark-blue paper. Manuscript made *waqf* to the Safavid shrine in Ardabīl. Painting signed by Ḥabīb Allāh of Mashhad (on the rock between the waterbirds). Metropolitan Museum of Art, New York, 63.210.11.

29. *The Combat between Barzū and Afrāsiyāb.* Signed by Muḥammad Yūsuf. From a manuscript of Firdausī's *Shāh-Nāmeh*, with additions of the *Barzū-Nāmeh*. Completed in 1058/1648 for Qarajaghay Khān in Mashhad. Royal Library, Windsor Castle, Holmes A/6, folio 320v.



for inclusion in a manuscript is known in certain examples from as early as the 8th/14th century. Yet it is true that a far greater number of independent pictures, especially of single figures or couples, exist from about 1540 onwards. There are two obvious explanations: the withdrawal of the royal patronage of artists in the late 1540s and the subsequent employment of these artists by patrons with less money at their disposal; and the altogether natural survival of 'newer', more recent works of art. Nonetheless, independent drawings and paintings were treated as no less precious than manuscripts: mounted in albums on folios with decorative coloured borders enhanced by gilding, illumination, cut-paper work, or marbling (pls. 25–8). The mounts often included poetry which had some connection – obvious, or esoteric and mystical – with the drawing or painting enshrined at the heart of the folio. Many Persian albums of the 10th/16th century and later are not in the slightest sense scrapbooks in any denigratory sense but instead splendid examples of the Persian art of the book, bound so that they display alternating samples of calligraphy and painting or drawing within fine gilded leather or lacquered papier-mâché bindings. Albums of this kind were assembled as late as the end of the 13th/19th century.

Shāh Ismāʿīl II, Ṭahmāsp's successor in 984/1576, managed to restore a modicum of royal patronage to those Persian painters and calligraphers who had remained in Persia instead of emigrating to India or to Ottoman Turkey. The scope of Ismāʿīl's patronage, however, may be judged by the thoroughly conventional court style in which the fifty surviving miniatures from his large *Shāh-nāmeh* are painted. The brother who succeeded him as shāh, Muḥammad Khudābandeh, sponsored no such artistic activity, and it is, therefore, not until 995/1587, when Shāh ʿAbbās I acceded, that major commissions of painting, both miniature and monumental are to be noted. A *Shāh-nāmeh*, presumably executed to mark the beginning of ʿAbbās' reign, exists only in a fragmentary gathering of sixteen folios with ten miniatures. The shah also ordered the restoring of a Timurid treasure adding gold-sprinkled margins and four archaizing Safavid miniatures (pl. 29) to complement the four exquisite Timurid miniatures already in the volume, which was then offered to the Safavid family shrine in Ardabīl as a *waqf*, or pious donation. A number of royal buildings in the shāh's new capital of Iṣfahān were also decorated with mural paintings (pls. 30–2). Artists, of course, continued to produce manuscripts and single-figure drawings and painting for nobles and for the middle-class patrons all over the country, who had become accustomed to being able to purchase such things (pls. 25–7). This seems particularly true in provincial capitals, especially Mashhad, as can be seen by one ambitious manuscript made for the governor of Khurāsān (pl. 29).

The state of painting in the provincial capitals of Safavid Persia in the 10th/16th century underscores a point about the relationship between art and economics made earlier, namely that more people had money to spend on art, although they probably had less of it than they had had previously. A great many well-illustrated manuscripts of classical texts that lack any specific dedications were made in Shīrāz, attesting to the flourishing activity of the



30. *Maiden reclining in a Landscape*. One of an ensemble of wall-paintings in the so-called 'Music Box' in the reception-pavilion called the 'Ālī Qāpū, located on the west side of the Maydān-i Shāh in Iṣfahān. Iṣfahān, 1019–29/1610 to 1620; cleaned and restored between 1965 and 1974.

31. *Feast in a Garden*. Wall-painting at the end of a small reception room (P.4) in the Chihil Sutūn, a reception-pavilion set in the garden-precinct west of the Maydān-i Shāh in Iṣfahān. Iṣfahān, 1050–60/1640 to 1650; cleaned and restored between 1965 and 1975.





commercial book-making ateliers, but equally to the presence of a buyer's market for such books. As with certain other schools of Persian manuscript production, there is a distinct 'look' to Shīrāz manuscripts (pl. 33), especially of the 10th/16th century. It resides not only in the proportions of the manuscript and the internal relationship of written-surface to folio size, but also in the shape and proportions of the miniature and its internal relationship to the text-panels that partially surround it. This tends to disappear in the late 10th/16th century and is barely noticeable in the 11th/17th century. It was not until 1949 that the 'look' of Shīrāz manuscripts of the 10th/16th century was found striking enough to have inspired the first inquiry into the relationship between text and miniature in classical Persian painting.

In Khurāsān, the second important provincial school of the Safavid 10th/16th century, a number of manuscripts of good but not outstanding quality were produced. Again the 'look' of these manuscripts is distinctive, the intercolumnar spaces being filled with gaily-coloured illumination of the kind used for chapter-headings in the large volumes of Firdausī (which often have large numbers of illustrations), or of the copies of Sa'dī and Jāmī, that were the most frequent products of the provincial Khurāsān workshops in the 10th/16th and the early 11th/17th centuries. Khurāsān was ruled from Herat by governors of the Shāmlū family in the last quarter of the 10th/16th century to about 1620, and recently the production of a number of finely made and often well-illustrated volumes made for the Shāmlū Khāns has been noted (pl. 34). It is interesting to see how in many of the best Shāmlū manuscripts, the generally 10th/16th-century figural style, with its echoes of Tabrīz and Qazvīn and Mashhad court painting, is used in combination with Herat compositions of the most classical kinds. At the same time, other pictures make clear that Shāmlū painting as much anticipates the changed figural canon of the Iṣfahān school of the 11th/17th century as it remembers Bihzād and his colleagues.

PAINTING IN THE 11TH/17TH CENTURY UNDER THE SAFAVIDS

From the Safavid period onward, written sources for the understanding of all Persian culture are greatly increased by the rise in the number of European accounts of travels in Persia. These tell of royal pavilions and reception halls with extensive painted figural decoration. Although little survives from the 10th/16th century of the palace-complex in Qazvīn, or of

32. *Shah Ṭahmāsp of Persia receives Humāyūn Pādishāh of India.* Large historical painting on the west wall of the audience-hall of the Chihil Sutūn, a pavilion in the garden-precinct of Iṣfahān west of the Maydān-i Shāh. Iṣfahān, about 1072/1660; cleaned and restored between 1965 and 1974.

33. *The city of Samarqand prepares a Triumphal Reception for Tīmūr on his return from the Five Years' Campaign in 798/1396.* Leaf from a partially dispersed manuscript of Sharaf al-Dīn *'Alī Yazdī's Ẓafar-Nāmeh*, copied in Shīrāz in 946/1543. Museum für Völkerkunde, Munich, Praetorius Loan LI 298a.





34. *Gayūmarth offered the First Fruits*. Leaf from a partially dispersed manuscript of Firdausī's *Shāh-Nāmeh*, copied for Ḥusayn Khān Shāmlū, governor in Herat, around 1009/1600. The Free Library, Philadelphia, Lewis Persian Miniature 103.

the wealthy domestic interiors such as those recently uncovered in Nā'īn (pl. 36), a good deal more from the 11th/17th century is still to be seen in reception-halls (pls. 30–2), garden-pavilions, public buildings such as bazaar-gates and baths, and in private houses. Together they help to amplify the accounts of the travellers despite the fact that many of the painted ensembles of the 11th/17th century described in those accounts have vanished. From a comparison of those that do survive, however, with contemporary miniature painting and album-pictures, it is obvious that the paintings in the ʿĀlī Qāpū and the Chihil Sutūn in Iṣfahān (compare pls. 26 and 27 with pls. 30 and 31) have exact parallels in both the single-figure paintings and drawings, and the larger group-compositions of the period. This is precisely the same situation noted for the Saljūq period (compare pls. 4, 5, and 6) and similar to that of the early 8th/14th century, to judge from the wall-paintings recently uncovered in a domed room behind the tomb of the Pīr of Linjān (compare pl. 37 with pl. 10) and from elsewhere in the Isfahān region. These examples appear to confirm that throughout Persia's Islamic history there was very little difference between the styles and the thematic concerns of monumental and miniature painting, however little evidence is still extant today.

Hence it is hardly surprising to find Safavid paintings in the royal buildings of Iṣfahān and Qazvīn that are painted in the distinctive manner of the premier 11th/17th-century Safavid artist, Rizā-i ʿAbbāsī, as he signs himself on a number of paintings and drawings of the late 10th/16th and the early 11th/17th centuries (pl. 35). The personality of Rizā has intrigued historians of Islamic painting since the turn of the century. As with the *oeuvre* of Bihzād, the same impulse has led to the examination of the paintings and drawings and the few manuscript illustrations that are signed either 'Āqā Rizā' or 'Rizā-i ʿAbbāsī,' in an attempt to establish whether they are the work of one and the same artist. An additional effect has been the weeding out of 'signatures of homage' from the truly 11th/17th-century inscriptions. The consensus, since 1964, is that both signatures refer to the same artist but at different stages of his career.

This style of figure-drawing, seen in plates 25, and 27, set a fashion that lived on into the second half of the 11th/17th century in the hands of a great number of other artists whose names are known from signatures on pictures and whose *oeuvres* are being established largely by such means. Rizā's pupil, Muʿīn *muṣavvir*, Muʿīn the painter, was the most original of all of the 11th/17th-century artists who painted in Rizā's manner (pl. 40). A great deal of information about him is derived from the long chatty, informative comments that often accompany his signatures, such as that on his portrait of Rizā, or on a drawing discussed slightly later in this chapter. He lived until the end of the 11th/17th century and the above remarks about his style and his *oeuvre* may be taken as reasonably representative of the artist in 11th/17th-century Persia. The position of individual artists, whose recognisable style and *oeuvres* can be identified by means of securely signed works, was not the case in 10th/16th-century Persia. What makes it possible a century later?

Three points must be considered. The first is that the 11th/17th century saw an unmistakable decline in the commission of major manuscripts from the royal ateliers, possibly due to the execution of the numerous, large painted ensembles for new buildings, but possibly also reflecting the change in tastes that stems from Ṭahmāsp's abrupt cessation of the patronage of painting in the middle of the previous century. The second is the subsequent decline in the traditional workshop methods of producing the best and most ideal of pictures, on which many artists might have worked but which only the most senior among them would sign. The third is the concomitant social revolution, which suggests that Persian society, from the end of the 10th/16th century, was prepared to accord increasing recognition to the artist as an individual and to place less emphasis on his capacity to create the most conventionally perfect of pictures. The latter point is underscored by the fact that it is far more routine for artists of this period (and later) to sign their paintings and drawings, even though we should remain sceptical with regard to certain painters' works. The incidental deduction is that the workshop system was still functioning in 11th/17th-century Persia, if by no means at its 10th/16th-century standard. In the end, what makes 11th/17th-century artists' biographies credible is also a paradox: the *lack* of written documentation in Persian sources other than what is actually inscribed on the pictures themselves (although this is potentially troublesome if the inscriptions are accepted at face-value alone), and the subsequent relative absence of any subjective explanations on the part of art-historians.

35. *A Youth* and *An Old Man*. Two drawings mounted on the same album-leaf, both signed: 'drawn by the humble Rizā-i ʿAbbāsī'. Iṣfahān, 1029–34/1620–5. Metropolitan Museum of Art, New York, 28.68.5.

The painting style of Rizā and his followers can be found in Persian paintings produced as late as the turn of the 12th/18th century. Indeed, Muʿīn was active until a year of so before his death in 1110/1698. At the same time, however, a change in taste of the shāhs of the middle of the century was producing a quiet revolution in the style of Persian painting. Foreign influences, from both India and Europe, were making themselves felt amidst the climate of the open-armed welcome Shāh ʿAbbās I extended to Western diplomats, mer-


خط سبزت که آیهٔ خوبیست





36. *Garden Scene* and *Hunting Scene*: two decorative panels in a reception-hall of a private house in Nā'īn. Part of larger decorative scheme in the style of Qazvīn painting, executed in the second half of the 10th/16th century. Compare the *Haft Aurang* painting, plate 24, for the manuscript source.

Facing page: detail of plate 32, *Shah Ṭahmāsp of Persia receives Humāyūn Pādishāh of India*

37. Painting of minarets, clouds, and trees flanking a *mihrāb* in the small domed circular room behind the actual tomb-chamber in the mausoleum of Shaykh Muḥammad ibn Bakrān. Compare the green foliage with its herringbone-pattern (now much faded) with the herringbone foliage in the painting from the *Manāfi' al-Ḥayavān* of 690/1291, plate 10. Linjān (near Iṣfahān), painting of the early 8th/14th century on the walls of a slightly earlier domed room.



chants, and priests: in Iṣfahān, as cosmopolitan as London is today, it would have been remarkable were Western features not to be reflected in the visual arts. As for Eastern influences, it should be remembered that Persian artists, calligraphers, and poets had had a share of the generous Mughal patronage in India since the middle of the 10th/16th century. In the middle of the 11th/17th century several progressive Persian painters appear to have gone to Kashmir to work in the ateliers of Jahāngīr (and later, for Aurangzīb) before returning to Persia in the reigns of Shāhs ʿAbbās II and Sulaymān (ʿAbbās II acceded in 1052/1642, Sulaymān in 1077/1666).

Even in the time of Shāh ʿAbbāsī, however, Europeans desirous of obtaining favours for their sovereigns or their employers had presented European works of art, including paintings, to the Persian monarchs. Moreover, occasional European artists were employed at the Safavid courts of Shāhs ʿAbbās I, Ṣafī, and ʿAbbās II. With regard to painting in particular, the stylistic changes, or more appropriately perhaps, the changes in the essential *mode* of painting that resulted from the increasing cosmopolitanism, can be seen in three different kinds of painting: in the cycle of historical murals in the Audience Hall of the Chihil Sutūn in Iṣfahān (pl. 32) and in several others painted in smaller rooms and on the exterior of this structure, and on the bazaar-gates in the new Maydān; in a series of life-size, decorative, oil paintings of men and women dressed in Persian costume of the second half of the century (pl. 39); and, in a number of drawings, paintings and manuscript illustrations. The latter were executed by artists whose names are known – Shaykh ʿAbbāsī and his sons, ʿAlī Qulī Jabbādār (see chapters 14 and 16), and Muḥammad-Zamān (pl. 38). These pictures present a variety of figures clothed in contemporary Persian, Indian or European dress, illustionistically and selectively modelled by light and colour. The question naturally arises whether this late 11th/17th-century synthesis of Eastern and Western elements results in successful painting in a Persian context. Opinions vary. To trace the eclectic and often anachronistic choice of foreign influences in such pictures as the *Lady Standing on a Terrace* (pl. 39), or the *Venus Reclining* (pl. 38), is as complex as it is to evaluate their aesthetic significance. Two points may be made. The first is that the eclectic images were very quickly codified and became formalised in the same way formulas of composition had governed Persian painting since the earliest documented periods. The second is that the 'new' images introduced by the still anonymous mural artists, and by the painters of miniatures whose names are known, contributed to a 'new wave' of stock imagery, compositions, and also to the stock thematic content of future Persian painting, not only the 12th/18th century but especially in the 13th/19th, when the next burst of extraordinary painting activity occurred in Persia.



38. *The Sleeping Venus*. Painting adapted from an engraving of Raphael Sadeler and now mounted in an 10th/18th-century album. Inscribed as having been executed for an exalted personage who may well have been Shāh Sulaymān. Signed: '(By) the work of the least of the slaves Muḥammad-Zamān, the picture was completed (in) the year 1087'. Iṣfahān, or at one of the Safavid palaces on the Caspian Sea coast, 1087/1676–7. Oriental Institute of the Academy of Sciences of the USSR, Leningrad, Album E-14, folio 86r.

PERSIAN PAINTING: ISSUES AND QUESTIONS

In this outline of Persian painting certain themes, preoccupations, and issues stand out as particularly salient while others, of equal importance, have only been indicated. There is the sense, mistaken but not entirely surprising, that Persian painting in the Islamic period is primarily an art of the precious book and the miniature or the drawing mounted in an album. This is so despite the pre-Islamic parallels for its subjects, the documentation evident in medieval Persian pottery, and the fragments of painted mural decoration that have been recovered archaeologically. There is the phenomenon of the stylistic and thematic similarities of painted ensembles of different scales that may be noted from the Saljūq period onwards, in both monumental and miniature paintings, and the adaptations to the curving shape of ceramic or glass vessels. There is the question of the *uses* of painting by those who commissioned it: for personal delectation, for panegyric propaganda, or for the proclamation of a position of local or national supremacy in a most ancient and traditionally Persian manner.

Two relevant questions arise. One concerns the moment at which the manuscript became a particularly beautiful, or a significant object invested with an importance quite out of proportion to its intrinsic nature. The other is related to the text of the *Shāh-nāmeh*. The splendour of an Islamic manuscript resides in several features: in the beauty of its calligraphy (enshrined, for the Muslim, as the most elevated of arts, since writing was the vehicle by which Islam itself was promulgated), the fineness of its paper, the luxuriousness of its binding, the gold and lapis lazuli richness of its illumination, and in the pictures. Illustrations are not, of course, found in the majority of manuscripts, for a variety of reasons. They do not occur in surviving Persian manuscripts before the late 7th/13th century, unlike the Arab countries, where illustrated manuscripts of texts of all kinds are common throughout the 7th/13th century and in the last years of the 6th/12th. Yet, it is notable that pictures carefully chosen to illustrate a text become a feature of fine Persian volumes by the early years of the 8th/14th century, lending specific significance to a specific text. The patron of the manuscript would have found his volume greatly enhanced by the choice of specific

narrative images designed for him alone. Indeed, there is now ample reason to think that such was the case with almost all of the great illustrated Persian manuscripts of the 8th/14th and 9th/15th centuries, and for most of the more ambitious Safavid and Qājār manuscripts as well.

Pre-7th/13th-century parallels for the Persian practice of illustrating books of good quality with narrative illustrations may easily be found both east and west of Persia, in the religious texts of the Manichaeans and Buddhists, and in the didactically-oriented scriptoria of the ʿAbbasids in Baghdad. Moreover, finely copied and illuminated Persian manuscripts of the Qur'ān survive from as early as the 4th/10th century, attesting to the medieval Persian concern for the beautiful volume. Nevertheless, when and from where came the notion of using an illustrated volume as a personal and very specific mode of expression, by adding the brightly coloured, narrative illustrations to small and essentially private books? How did these illustrations become one of the imperatives of 8th/14th-century and later *Shāh-nāmeh* manuscripts, and of other epic, romantic, or historical texts? Why the demand for the apparently narrative but probably allegorical or symbolic images that are one of the poignant glories of the finest copies of the poems of Niẓāmī, Saʿdī, Ḥāfiẓ and Jāmī, ʿAṭṭār and others, where moral and mystical themes acquire concrete reality in being visualised, a focus that intensifies the multiple ambiguities of such texts?

Central to this discussion is the persistant recurrence throughout the history of Persian painting of illustrated texts of the *Shāh-nāmeh*, the Persian national epic of Persia's pre-Islamic past that has been called the 'title-deeds of the Persian nation's nobility'. Firdausī's text linking historical episodes with ancient Persian tales and legends was completed towards the end of the 4th/10th century, but many of its elements are of greater antiquity. Variant versions, especially of the heroic tales set in pre-Islamic Sīstān, were never included in the text of Firdausī's *Shāh-nāmeh* although they survive independently, painted on the walls of buildings in Soghdian Pjanjikent or as separate heroic epics of Islamic Persia, such as the *Barzū-nāmeh* (pl. 29). As with other genres of Persian book-illustration, illustrated texts of the *Shāh-nāmeh* are not extant (or at least, not presently known to be) before the early 8th/14th century, over 300 years after the completion of Firdausī's text. Unless this should be entirely due to the destructiveness of the Mongol invasions of the 7th/13th century, the lacuna is curious, especially since the *Shāh-nāmeh* figures so prominently among the illustrated manuscripts of the 8th/14th century, in eleven known manuscripts and at least two fragmentary sets. Speculation has arisen that perhaps the text of Firdausī's *Shāh-nāmeh* might not have existed as an illustrated text before that time. In line with this slightly unorohodox suggestion is the observation that although figural subjects recognisably associated with *Shāh-nāmeh* stories – such as Farīdūn mounted on Birmāyeh, or the tale of Bizhan in the well, not to mention the numerous representations of Bahrām Gūr hunting with his saucy servant Āzādeh – occur on painted ceramic and inlaid metal-pieces of the 6th/12th and the 7th/13th centuries, these are either not associated with the standard *Shāh-nāmeh* verses, or they have no accompanying texts at all. They may instead be representations of variant, Persian epics that were never woven into Firdausī's text (see pl. 29). It should be noted that the earliest surviving catalogued text of the *Shāh-nāmeh* itself dates only from the middle of the 7th/13th century. It should be further noted that all the extant 8th/14th-century texts of the *Shāh-nāmeh* that have been studied show a far greater amount of textual variation that might be expected for a text that quickly became so popular and, at the same time, so exceptionally meaningful for all Persians. Almost every ruler or governor in Persia, from the middle of the 8th/14th century onwards, commissioned a copy of this text, (see pls. 7, 8, 13, 22, 29 and 34) or of historical texts that appear to have equal, if not greater, personal significance, such as Shāh Rukh's reworking of Rashīd al-Dīn's *Universal History*, Sulṭān Ḥusayn's *Ẓafar-nāmeh*, even Shāh ʿAbbās II's cycle of historical paintings in the Chihil Sutūn (pl. 32). In later centuries, a *Shāh-nāmeh* might be the only manuscript of royal commission, as with Shāh Ismāʿīl II and Shāh ʿAbbās I, whose pictorial requirements appear to have been mural instead of miniature.

At this stage of research, however, the question remains open: whether the early 8th/14th-century emergence of the illustrated manuscript in Persia as a particularly *personal* mode of expression, especially a princely expression, and the apparently early 8th/14th-century emergence of an illustrated text of fundamental Persian significance, the *Shāh-nāmeh*, were coincidental in the history of Islamic Persian culture, a phenomenon existing independently of the admitted destructiveness of the invasions of the 7th/13th century.

Other open questions relate more specifically to the processes of painting. The actual workshop methods must largely be deduced from the paintings (pl. 40) and the manuscripts themselves, although this information may be supplemented by analogy with documented workshop practices in contemporary India, to which two master-painters from the Safavid court of Shāh Ṭahmāsp emigrated to the court of the first Mughal emperors. The technical



considerations of painters' materials – pigments, inks, brushes and their preparation, will almost certainly recede in importance in the light of current investigation into the proportional structure of the compositions themselves. For, discernable in all fine Persian paintings and reflected, however dimly, in pictures of lesser quality is a dynamic of rhythmic forms and of formal, geometrical, compositional relationships that exists alongside the rhythm of the colouristic relationships already briefly noted in the discussion of Timurid painting. This question of dynamic formal rhythms based on the proportional relationships between the painted and the written surface of a manuscript folio will undoubtedly be a dominant concern of future research in Persian painting.

In contrast, the focus of studies of Persian painting, in recent years, appears to have been establishing the identity of the individual artist and compiling biographical documentation. But problems of interpretation may arise when paintings and drawings are attributed to artists solely on the basis of perceived visual similarities of line, colour, compositional features, or distinctive draughtsmanship. Perhaps the essential question is this: do the names of Persian painters really matter, in the sense that they matter in the West? Is the entire notion of 'creation' by an individual artist a Western concept applied relatively recently to an Eastern situation?

Two factors might suggest that, even in an artistic society of archetypes and workshops, names of artists were not unimportant. The first is the sense of particular reality conveyed by the informative inscriptions on a number of 11th/17th-century pictures, many of them by Muʿīn, as on his portrait of Rizā-i ʿAbbāsī (see pl. 40). The most vivid of these inscriptions is on a well-known drawing done on a snowy day in Isfahān. It recounts a local tragedy, comments on the severe cold and the depth of the snow, on the lack of basic necessities and the subsequent excessively high cost of bread, and concludes with the artist's motive, to amuse himself and while away the time. It must be noted, however, that such inscriptions occur on drawings and on single-figure paintings only, and almost never in larger or more ambitious narrative illustrations or pictures of the type sometimes called *majlis*, or group-pictures (pl. 19). This might well indicate a distinction of purpose that has not yet been adequately recognised. The second factor, perhaps more telling, is the number of signed Persian calligraphic specimens that still survive, and the subsequent number of calligraphers, as opposed to painters, whose names are known (see Chapter 20). If, to this evidence, is added the accounts of the fame of Persian calligraphers, it becomes clear that the signatures on calligraphic works were intended as unassailable identification of the calligrapher in the eyes of contemporary society (and a dividend for modern, Western scholars!). The lack of such signatures on paintings until the late 8th/14th century appears to suggest that the situation for painters, other than Mani and Bihzād, was not what obtained for calligraphers and scribes until the end of the 10th/16th century, when the mini-revolution espousing 'equal rights for pen and brush' occurred. The explanation for the fundamental disdain for practitioners of the visual arts usually refers to the *ḥadīth*, the Traditional Sayings, ascribed to the Prophet Muḥammad, which warn that the maker of images or pictures will be among those most severely punished on the Day of Judgement, or that the painter among those who were cursed by the Prophet. But traditional objections aside, what does the lack of a set of absolute criteria, say about Persian painting as opposed to Persian calligraphy?

Finally, it is natural that queries concerning the artist should lead to queries about the images depicted by his brush. Muʿīn's 'portrait' of Rizā painting a European is a perfect example (pl. 40). When, for instance, does the depiction of a *type* of personage in a Persian painting give way to the representation of a specific person? And to what extent has this ever been a Persian concern? Is the existence of a genre of Persian painted portraits, arguably beginning in the 10th/16th century, yet one more occurrence of foreign influences on the art of Persia from both East and West? This issue of influences on the arts of Persia has been a persistent leitmotif in the history of Persian culture in general, and it is just one of the areas which need to be further investigated if the full, and many-layered meaning of the art of painting in Islamic Persia is ever to be properly understood.



40. Portrait of Riza-i Abbasi painting a European Painting by Mu'in *musavvir*: a long inscription states that he started the painting in 1044/1635; that the subject dies the same year; and that the painting was completed some forty years later, in 1084/1673, as a gift for the painter's son. Princeton University Library, 96G.

39. *A Lady in Persian Dress standing on a Terrace*. Painting in oil on canvas. One of an ensemble of at least four such pictures originally decorating an interior room or hall. Iṣfahān, 1060–91/1650–80. Nigāristān Palace Museum, Tehran.



14 PAINTING IN THE POST SAFAVID PERIOD

When the Safavid dynasty fell in 1135/1722, Persian painting seemed to have broken once and for all with the old tradition developed during the Mongol and Timurid periods, and settled firmly for imitation, painstaking but essentially superficial, of European models. Such work had been turned out in some quantity by Muḥammad Zamān, ʿAlī Qulī Jabbādār, Shaykh ʿAbbāsī, and their followers during the last quarter of the 11th/17th century; and though the old style of miniature painting was kept alive by Muʿīn till his death about 1116/1705, the westernising style was definitely 'in' (see also chapters 13 and 15).

ZAND PAINTING

The horrors of the Afghan conquest and the campaigns of Nādir Shāh, by which the invaders were eventually expelled and Persian military glory renewed, occupied most of the first half of the 12th/18th century. Such an atmosphere was not conducive to the practice of painting, and the only surviving works worth mentioning are two good portraits of Nādir Shāh in oils (see pl. 3); the other is in the Commonwealth Relations Office in London. Both are strongly influenced by contemporary European portraiture. The third quarter of the century saw the comparatively settled regime of Karīm Khān Zand at Shīrāz, and under his patronage (he was a great builder) the arts flourished. Not only were the walls of palaces adorned with large oil paintings, but there was also a revival of miniature painting. However, it is no longer to be sought in book illustration, but rather in the decoration of papier-mâché book-covers, penboxes, and mirror-cases. In this technique, which goes back to the late 9th/15th century, the surfaces were covered with a thin coating of fine plaster, or gesso, on which the design was painted in the miniature style of the period, and the whole was then lacquered or varnished over. But some separate album-pictures and portraits of good quality were also produced. The leading artist of the time was Muḥammad Ṣādiq, in whose hands the style became fully formed – a style that remained virtually unchanged until the middle of the 13th/19th century (pl. 2). The signature of Ṣādiq appears on oil paintings, miniatures, and lacquer pieces, and his long working life seems to have spanned the second half of the 12th/18th century. One tradition attributes to him the great mural in the Chihil Sutūn pavilion at Iṣfahān depicting Nādir Shāh's victory over the Mughal army at Karnāl in 1151/1738. The European features of the style – shading, modelling, drapery, and perspective – are all on the surface; conception and subject remain unmistakably Persian. ʿAlī Ashraf, a specialist in lacquer, is the only other 12th/18th century artist who merits special mention; his designs of flowers and birds are of outstanding richness and delicacy.



2. *The Lovers*, Ṣādiq, Nigāristān Museum, Tehran.

EARLY QĀJĀR STYLE

Karīm Khān's family were ousted by the Qājārs before the end of the 12th/18th century. The latter were a family of Turkish stock centred in Astarābād (now Gurgān) at the south-eastern corner of the Caspian Sea. After achieving sovereignty under the sadistic eunuch, Āqā Muḥammad, they established their capital at Tehran, where it has remained ever since. Āqā Muḥammad was succeeded in 1212/1797 by his nephew, Fatḥ ʿAlī Shāh, whose reign ushers in the most fruitful period of post-Safavid painting. In his early years the new monarch was served by three great painters: Mīrzā Bābā, Mihr ʿAlī, and ʿAbdallāh Khān. The first of these was already in the service of the Qājār family at Astarābād before they came to power; Mihr ʿAlī was perhaps the best painter of the three, and ʿAbdallāh Khān seems to have had the longest working life, and died at a great age just before the middle of

1. *Fatḥ ʿAlī Shāh, Mihr ʿAlī*, Nigāristān Museum, Tehran.



3. *Nādir Shāh*, Victoria and Albert Museum, London.



4. *Young Falconer*, style of Sayyid Mīrzā. Private collection.



5. (detail) *Presentation of the Ambassadors at the Audience Hall of the Nigāristān Palace*, from a copy of the large wall fresco ʿAbdallāh Khān. India Office Library and Records.

the century. All three celebrated their royal master's truly royal appearance in life-size portraits (pl. 1) and other large oil paintings, but Mīrzā Bābā and Mihr ʿAlī also produced fine small-scale work in the form of miniatures, lacquer, and painted enamel. ʿAbdallāh Khān's greatest work was the celebrated fresco, executed in 1228/1813 and since destroyed, which covered three sides of the audience-hall in the former Nigāristān Palace. It represented Fatḥ ʿAlī Shāh enthroned in the midst of his court and attended by a group of his sons and a number of foreign ambassadors, including Sir Gore Ouseley from England and General Gardanne from France. The whole composition comprised no fewer than 118 life-size figures (pl. 5).

During the last decade of Fatḥ ʿAlī Shāh's reign (he died in 1250/1834) a younger generation of painters was coming to the fore. Sayyid Mīrzā specialised in portraits of the king and his family executed with much skill and in a rather individual style in both oils and lacquer (pl. 4). Aḥmad was probably a pupil of Mihr ʿAlī; a fine portrait of Fatḥ ʿAlī Shāh by him hung in the British Embassy at Tehran. A number of his paintings belong to the next reign, by which time his style had become more Europeanised. Muḥammad was a conservative with a distinctive style, excelling in the representation of moon-faced beauties; his male figures are less successful.

Painted lacquer has already been alluded to, and it was probably in the last years of Fatḥ ʿAlī Shāh that the foremost lacquer painter of the Qājār period began to work. This was Najaf, or Najaf ʿAlī, son of the painter Āqā Bābā of Iṣfahān. He adopted the style of Ṣādiq, which he developed and refined thus forming a bridge between the Zand/early Qājār style and the more meticulous westernised work characteristic of the reign of Nāṣir al-Dīn Shāh (1261–1310/1848–96). Najaf continued working well beyond the middle of the century, and his three sons and younger brother carried on the tradition into the 1300s/1880s; their work will be considered later.

Miniature painting in its ordinary sense enjoyed a certain revival under Fatḥ ʿAlī Shāh after the doldrums of the 12th/18th century (pls. 7 and 8). A few finely illustrated manuscripts have survived, notably a magnificent copy of the king's own *Dīvān*, or collected poems, with painted lacquer covers, miniatures, and illustrations, all by Mīrzā Bābā. This was sent to London as a present to the Prince Regent, and is now in the Royal Library at Windsor Castle. Album-pictures were also produced in some quantity, mostly in the form of portraits and flower studies. But meanwhile a new field was opened up for the Persian miniature painter by the increasingly frequent visits of European envoys and their suites, merchants, and wealthy travellers, as a result of the newly established diplomatic relations between the Persian court and various foreign powers, notably England. This

constituted a sort of superior 'tourist' art, taking the form of miniatures on paper, usually a single figure on plain background, illustrating Persian types, costumes, occupations, and customs. Sir William Ouseley in 1226/1811 records that enormous numbers of these were offered for sale, and examples can be found in most representative collections of Persian painting (see pl. 29, Chapter 8). They are, on the whole, well executed with considerable charm and some originality. The parallels with the contemporary 'rice-paper' paintings of Canton, which poured into England as a sideline to the tea trade, and the mica paintings and 'Company Painting' of India, are very close.

Two other forms of painting were explored and developed at the same time: painted enamel on gold, silver, or copper, and *eglomisé*, or 'behind glass' painting. Fine examples of the former can be seen in the display of the former Crown Jewels in Tehran. The foremost exponents under Fatḥ ʿAlī Shāh were ʿAlī, Baqīr, and Muḥammad Jaʿfar. The best artists worked exclusively on gold, and their delicacy of execution and brilliant colours put these enamels in the forefront of achievement in the field of Qājār painting (pl. 6). An even greater delicacy and refinement were attained under Nāṣir al-Dīn Shāh in the third quarter of the century. *Eglomisé* painting was a difficult technique, the work having to be executed in reverse, beginning with the highlights and other surface details and ending with the background, and as the glass used was usually rather thin surviving examples are comparatively rare. There are fine *eglomisé* portraits of Fatḥ ʿAlī Shāh and some of his sons by Mihr ʿAlī (pl. 9) and other leading artists, and the effect is something between the oil paintings and enamels already described (pl. 10). The technique can be probably be traced to imported Bavarian examples which were extensively produced in the 12th/18th century, the subjects being mostly of a popular religious character.

LATER QĀJĀR STYLE

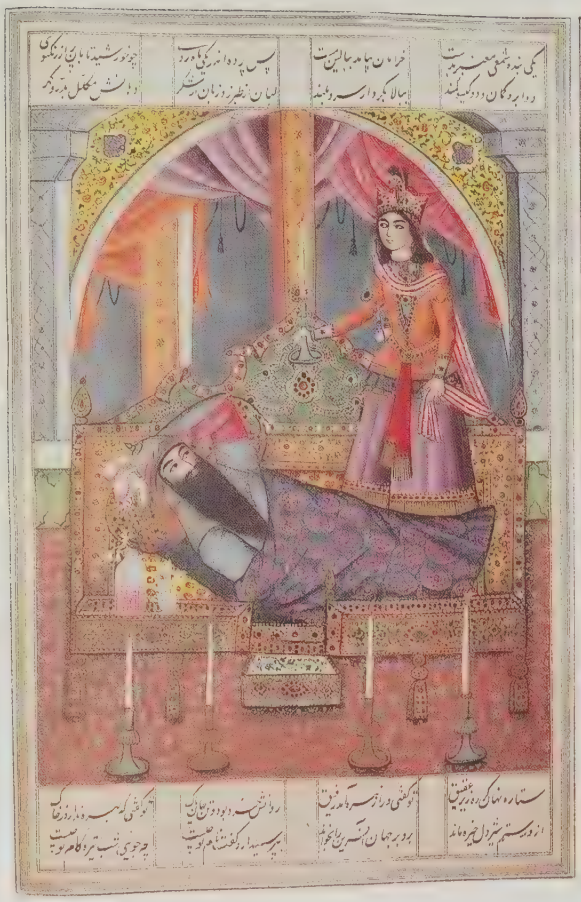
The reign of Muḥammad Shāh (1834/48) was a period of transition. On the one hand, many painters carried on the style of the previous reign virtually unchanged, and, on the other, a further strong injection of western influence may be traced to Abu'l-Ḥasan Ghaffārī, scion of a line of painters, a pupil of Mihr ʿAlī and arguably the greatest Persian artist of the Qājār period. He was a native of Kāshān, and became *naqqāsh-bāshī*, or painter laureate, under Muḥammad Shāh by whom he was sent on a course of study to Italy. On his return, shortly after the accession of Nāṣir al-Dīn Shāh (1264/1848) he developed a genius for lifelike and sometimes merciless portraiture, which he exploited in a series of frescos now preserved in the Īrān Bastān Museum, Tehran. Inspired by the great Nigāristān group



6. Enamelled gold bowl, Baqīr. Private collection.

7. *Rustam and Tahmīna*, miniature painting. Private collection.

8. *Khusrau and Shīrīn*, miniature painting. Eton College Library.







9. *Prince ʿAbbās Mīrzā*, eglomisé. Ethnographical Museum, Tehran.

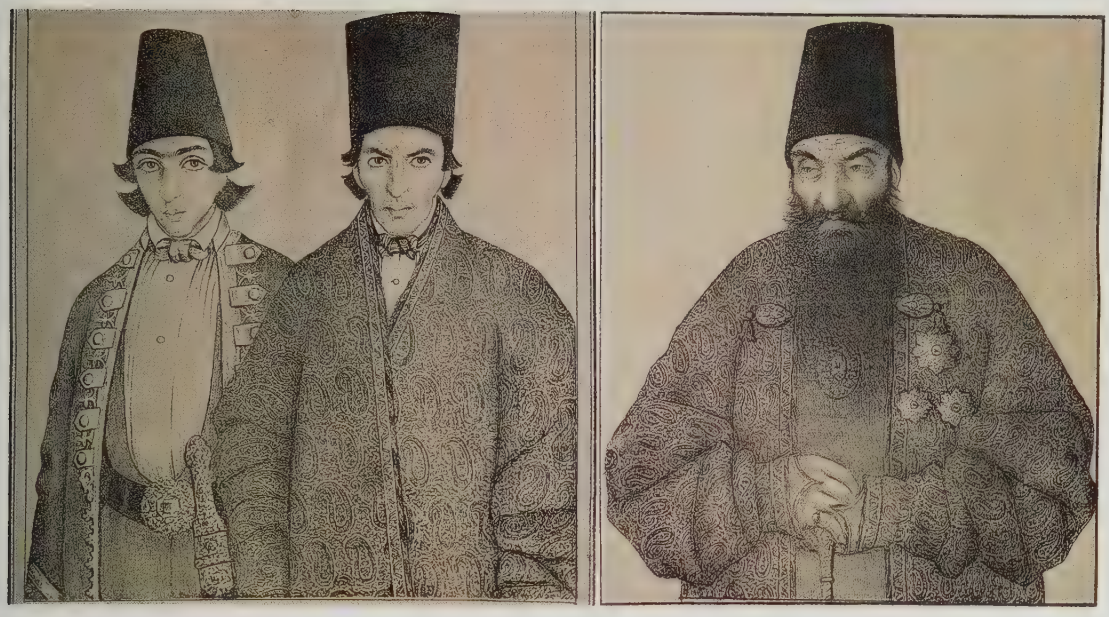
10. *A Girl*, eglomisé. Private collection.



of ʿAbdallāh Khān, these show Nāṣir al-Dīn Shāh enthroned, with his young sons and chief ministers, and attended by numerous courtiers of all ranks, together with foreign envoys. As in their Nigāristān prototype, all these figures are life-size, but each one of them is highly individual, in marked contrast to the rather wooden and standardised figures of ʿAbdallāh Khān. Abu'l-Ḥasan's other major commission in the 1270s/1850s was the adornment of a six-volume Persian translation of the *Arabian Nights* in the Gulistān Imperial Library. For this extraordinary work he organised a team of thirty-four painters who executed over 1100 pages of miniature painting, often with three or more pictures to the page, under his supervision and in many cases, we may assume, from his own designs.

It was after this that Abu'l-Ḥasan received the title of *Sanīʿ al-Mulk* ('Painter of the Kingdom'), by which he is generally known. The king also entrusted him with the production and illustration of a government weekly newspaper full of court and official news, and illustrated with portraits of princes and statesmen and, occasionally, representations of remarkable events. The whole was printed by lithography, a process which does full justice to Abu'l-Ḥasan's incisive portraits (pl. 11). The earliest books printed in Persia by lithography date from the 1260s/1840s. The process allowed the whole text to be written in manuscript on the prepared stones, and allowed for its illustration, if desired. This lithographic book illustration constituted a further, though minor, field for the Qājār artist to explore. The classical texts – Firdausī, Niẓāmī, *Kalīla wa Dimna*, and many others – appeared in numerous illustrated editions during the course of Nāṣir al-Dīn's reign, and among the earlier examples the name of ʿAlī Qulī Khūyī frequently appears as illustrator. His style is founded, naturally enough, on that of the court painters of Fatḥ ʿAlī Shāh. The drawing and conception are often naive, but can be effective, and in a series of triangular 'thumb-pieces' in the Tehran Niẓāmī of 1264/1848 he displays a remarkable imagination and considerable sense of humour.

Painted lacquer and enamel pieces continued to appear throughout the reign of Nāṣir al-Dīn, the former in enormous numbers. The standard had been set by Najaf, and was carried out with increasing refinement by his younger brother Muḥammad Ismāʿīl, (pl. 12), who specialised in European subjects, and his three sons, Muḥammad Kāẓim, Jaʿfar, and Aḥmad. Kāzim and Jaʿfar also excelled in painted enamel. Fine lacquer was, indeed, being turned out by innumerable artists, many of them highly skilled and gifted. Space allows no more than a bare mention of the Imāmī of Iṣfahān, Aqā Buzurg the protraitist, Luṭf ʿAlī the flower painter, and Fatḥallāh of Shīrāz; Rāzī the illuminator of Tehran; and the independent



11. *Two Princes*, Abu'l-Ḥasan, and *Qawam al-Mulk*, Sanī' al-Mulk, lithographs. Private collection.

artists Ibrāhīm, Ḥaydār 'Alī, and Muṣṭafā (who also illustrated a lithographed *Shāh-nāmeh* in 1307/1890). The richness and delicacy of these small-scale works, mirror-cases and penboxes for the most part, can hardly be exaggerated.

Nāṣir al-Dīn founded a College of Art, the *Dār al-Funūn*, at Tehran, with the express purpose of training painters in the European style. In its early days in the 1280s/1860s its most gifted alumnus was Ismā'īl Jalā'īr, who has left some fine portraits and groups in both oils and miniature technique. His style is markedly individual and often tinged with a sort of gentle melancholy (pl. 13). A later pupil of the school was the long-lived Muḥammad Ghaffārī, a nephew of Abu'l-Ḥasan, who is usually known by his title of *Kamāl al-Mulk* 'Excellence of the Kingdom'. He too visited Europe, and his mature style is almost completely westernised.

In a short chapter such as this it has not been possible to do more than give a very general outline of the subject, noting the main trends followed and the various forms taken by painting in this period. The death of Nāṣir al-Dīn provides a convenient stopping place.

12. Mirror Case, Muḥammad Ismā'īl, dated 1270/1854. Private collection.





13. *Ladies round a Samovar*, Ismā'īl Jalāyir. Victoria and Albert Museum, London.

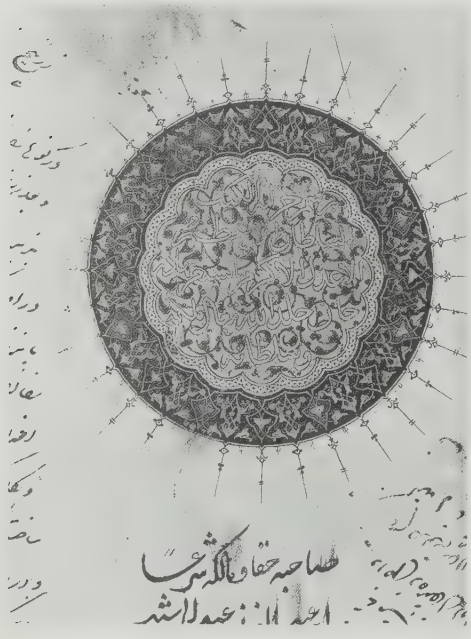
15 THE ARTS OF THE BOOK

THE BOOK IN Islamic Persia takes the form known to the Classical world as codex, a volume of sewn gatherings attached into a cover. The codex seems to have developed about the second century AD in the Roman Empire, where it gradually superseded the papyrus roll, and whence it would have been brought to Persia in the Sasanian period by Manichaeans, Christians and Jews, groups who cherished scriptures in the literal sense. Fragmentary bindings which are considered to be Manichaean and of the eighth or ninth centuries have, indeed, been found east of Persia at Turfan in Chinese Turkistan, but their close links with Coptic bindings suggest a derivation from the eastern Mediterranean. With regard to the Islamic world, it is said that in Arabia in the time of the Prophet the Qur'ān was committed to potsherds, to bladebones, or to sheets kept between boards. In the last case a full stitching and binding process may have been involved.

STRUCTURES AND TECHNIQUES

Before tracing the stylistic history of the book in Persia, it may be convenient to consider its structure.[1] Until the 4th/10th century the Arab world preferred to copy the Qur'ān upon parchment of sheep or goat skin. This practice may have extended to Persia also; however, the knowledge of paper-making was early established in Samarqand, following – or at all events, stimulated by – the capture of Chinese craftsmen in 133–4/751. Samarqand continued the most famous centre of paper-making, though the paper of Baghdad was also esteemed. Linen and hemp were used in the form of recycled rags and rope, the pulp being caught with a mould and deckle. Laidlines, resulting from supports in the base of the mould, are usually rather faint, and sometimes absent, suggesting that a base of textile might have been used. Paper would be sized with a mixture of starch and vegetable glue, or with albumin let down in vitriol.[2] When dry the paper was placed on a smooth slab and burnished with a rounded instrument. Paper could be dyed, before sizing, to produce delicate tones of blue, rose, yellow and lilac. Chinese paper with a heavy tinted dressing – presumably of kaolin – and motifs in gold is found in the mid-9th/15th century.[3] From the 10th/16th century frames of heavy tinted paper with a central window were sometimes used around the central page; they may be a part of the original design, but may also be early renovations. Framing borders and endpapers are sometimes made of marbled paper (*abrī*). For this colours mixed with boiled gall were distributed on the surface of water made viscous with gum tragacanth, and paper was laid on the colours to take the print. Parchment continued to have an ancilliary role for pouncing. For this, a thin transparent sheet was laid over the sketch to be reproduced, the outline was pricked through, and transferred to another sheet by dark powder rubbed through the holes.

1. *History* of Ḥamzah b. al-Ḥasan al-Iṣfahānī of 834/1431, 2 a, *shamseh*. Or. 2273. British Library, London.



The text would be copied before binding. A grid was sometimes used to impress lines as a guide for the writing, but often the use of such an aid is not detectable. The text might be contained in rulings, usually done after copying. In the early periods rulings would be simple, and often in red; from the later 8th/14th century, they would be multiple, in ink, gold and colours. Illumination, in the form of *shamseh*s (decorative roundels) which may provide a patron's name (pl. 1), *sarlauḥ*s (first pages, or double openings) framed in ornament, which sometimes acknowledge a debt to the writing board by a vestigial handle at the side (pls. 6 and 17), and *'unvān*s (ornamental headings), would be added after copying, as would any pictures (the tagging of picture pages with knots of silk is a late practice). The colours used in decorative illumination or narrative illustration are mineral compounds such as minium, vermilion, yellow ochre, orpiment, chalk white, lead white, verdigris, malachite, azurite, and the most prized of all lapis lazuli. They were ground and washed, and applied in a medium of gum arabic, glue or albumen, with a brush allegedly of squirrel or

cat hair. Layers were opaque and were permitted to dry before detail was added. The result was burnished with an agate stone. Gold also was used in leaf and brush-gold form. As leaf it might be sprinkled in fragments to make a random pattern in a margin; to make brush-gold it had to be ground with an abrasive, such as salt, and could then be washed, mixed with gum, and treated as a pigment by the *mudhahhib*, the specialist in gold work. The pages being finished – or occasionally not finished – they were collected into sections, whose spinefolds were sewn together with a linked stitch. The spinefolds would then be hammered to produce an even surface, and a linen lining was pasted to the spine with asphodel paste. The edges were trimmed with a knife of sword-like proportions. Endbands at the head and tail of the spine were sewn with two crossing threads. The textblock now formed a regular cuboid: the spine was flat, and the spine of the binding would be glued directly to its lining.

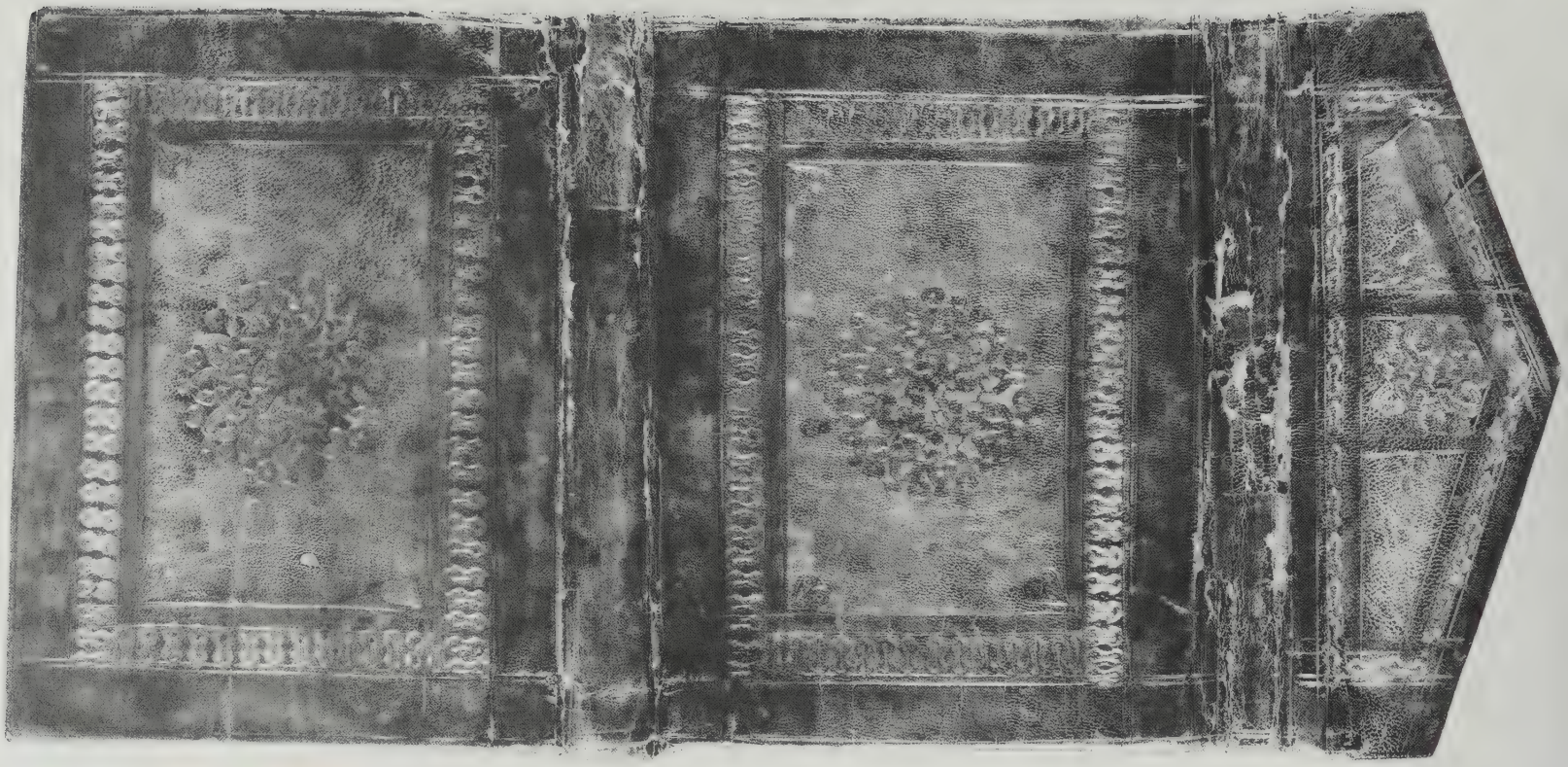
The binding of a manuscript would not project beyond the textblock, but characteristically would have a jointed flap projecting from the back cover (or the lower cover, since books were stacked horizontally). The first part of the flap folds up against the fore-edge, the second part, which has chamfered corners like the flap of an envelope, folds under the front cover in surviving examples, though in illustrations it is often shown as lying over the front cover. Though very occasionally of wood, the boards would normally be made of layers of glued paper. Goatskin was usual for the outer covering; the doublure, which was often lighter in colour, or more delicate in ornament, might be of sheepskin. The leather might be decorated with blind tooling. This was applied to slightly damp leather, the tools being heated and cooled to a requisite extent. In the earlier periods designs were worked from the repeated use of punches with small motifs. From the 9th/15th century larger stamps with elaborate patterns were used, the board under the leather sometimes having been recessed to receive them: in this form the principle elements of the design stand in relief from their ground. Early stamps were of hardened leather, later metal was used. In the 10th or 11th/16th or 17th centuries the stamp might be applied to a thinly pared piece of leather which was glued into a recess. The leather might be further worked over with a burin. Gold could be applied to the design, either stamped over a binding medium, or painted on. Another technique, used for doublures, is filigree or filigrane (*munabbat-kārī*) in which leather, stamped and cut into openwork, is laid over grounds of coloured paper. This is particularly characteristic of the fine manuscripts of the 9th and 10th/15th and 16th centuries, but it is found in one of the Manichaean fragments and so may have been practised down the centuries. By the 10th/16th century, paper filigree was sometimes substituted for leather. From the later 9th/15th century lacquer – in the Persian sense of varnished painting on a chalky ground – was also used for covers. It must be added that bindings were always liable to damage and their attachment to manuscripts was vulnerable. In consequence, many volumes may have later or modern bindings, or bindings partly cannibalised from earlier work: the dating of bindings is thus often debatable.

THE WORKSHOP

The greatest books were produced in the royal workshops to the orders of princes, but there was also an extensive trade in new and secondhand books, booksellers often having a particular street in a great city. By tradition the most honoured figure in a workshop would be the scribe (*kātib*). It is however remarkable that the greatest of the princely establishments seem to have been under the direction of painters. Painters sometimes received the appellation *muṣavvir* which indicates unequivocally that their work was representational. The term *naqqāsh* is more ambiguous: sometimes it distinctly means an artist in abstract illumination, but occasionally it is used of a painter who is known to have worked in the representational field – though it may be that he was skilled in both areas. The binder (*mujallid*) would be an essential member of a workshop, though comparatively few attained a status sufficient to cause their name to be recorded. The principal figures would often be attended by apprentices.

THE EARLY CENTURIES

The early history of the book in Islamic Persia is unclear because of the scarcity, and sometimes the inaccessibility, of surviving examples. Two reports from the 4th/10th century point tantalisingly to a possible connection to the Sasanian world. Al-Masʿūdī claims to have seen in 303/915–16 at Istakhr a manuscript with the pictures of Sasanian kings, and Ḥamzah b. al-Ḥasan al-Iṣfahānī mentions a similar work. But it is not clear what form the manuscripts took. Some 3rd–4th/10th-century Persian works are, however, represented in







the Chester Beatty Library.[4] A detached binding from one of a set of four Qur'ān sections is datable by the text to 292/905 (pl. 2). Its cover is blind tooled. The design is dominated by a central medallion in the form of densely interlaced strapwork, which is contained in a bold frame. The inner corners of the frame are ornamented with a double conical motif, pointing into the corner. The frame has plain guard bands and a central row of oval motifs with indented sides ranged on their short axis. This scheme of medallion, corner-pieces, and frame is dominant in subsequent periods, though the proportions and constituent motifs will change.

Another Qur'ān section is dated by a part in Istanbul to 361/972. Its binding, a work of sober magnificence, illustrates the problems of dating: it has been remade and some authorities consider it somewhat later than the manuscript. There is again a broad frame containing motifs; they resemble pairs of ram's horns ranged on their short axis. Within this is a diaper field. On the intersection of alternating rows of the diaper are rosettes, upon each of which the twenty-one words of chapter CXII of the Qur'ān, *Al-ikhlāṣ*, have been sculpted with a stylus. The text of the manuscript commences with a fine double *sarlauḥ* whose design supports the contemporaneity of its own cover, and also that of the cover described previously. The *sarlauḥ* has a medallion and frame of similar proportions to those in pl. 2 and it has a diaper field between them. The diaper pattern is sometimes used in later bindings, but seems to be more characteristic of the doublure than of the outside. It is probable that the diaper is a variation upon an earlier squared field. One of the Manichaean fragments has this, and it is also exhibited by the binding of a Qur'ān fragment sold by Sotheby's in 1985 and identified as coming from 6th/12th century (pl. 3).[5] In both cases the squares bear a saltire, thus suggesting a relation, however remote, to the design of the Pazyryk carpet, datable to the 4th–3rd century BC, or the Nineveh door-sill of 645–640 BC.

THE IL-KHANIDS AND THE LATER 8TH/14TH CENTURY

Ettinghausen, has argued that the covers of the *Manāfi'-i Ḥayavān* (pl. 4), which was copied at Marāgheh between 694, 697, 699/1294–1300, are original, though they also have been remade.[6] The covers are blind tooled and use small areas of dense geometric decoration. The central motif is a slim mandorla which is divided into compartments filled with y-punches or stars. Between the points of the mandorla and the frames are small lozenges composed of crosses, and crosses are used again in triangular corner-pieces, and at the midpoint of the inside edge of the long sides of the frame. The flap is decorated in a similar mode, but with a round medallion anchored to the hinge of the flap by a split palmette. The binding must,

Ettinghausen believes, be distinctly earlier than that with a rather similar composition on a *Mu'nis al-Aḥrār* of 741/1341, in which the central motif is more dominant, and the subsidiary motifs of the field are no longer free of the points of the mandorla, but attached to them as pendants.[7] Ettinghausen refers to the bindings of a Qur'ān set made under Öljeitü in 704–6/1304–6, and of a set made for him in Hamadān 713/1313.[8] As with the *Manāfiʿ-i Ḥayavān*, the covers are dominated by a central geometric motif, which may be a circle or other more complex figure, whose outline is emphasised by multiple rims, and which contains fine and dense geometric work within it. In contrast to this type of decoration on the outer faces, the doublures of the volume of 704/1304 have an overall pattern of arabesque printed by blocks. The twisting scrolls support rather sturdy split palmette leaves derived from the repertory of illumination of the 6th and 7th/12th and 13th centuries. The volume of 704/1304 bears the oldest dated binder's signature, ʿAbd al-Raḥmān, which is also found on the portion of 706/1306.

The dominance of geometric ornament continues into the period immediately following the fall of the Il-Khanids. A Qur'ān copied in Marāgheh in 738/1338 has a central medallion containing a ten-point star and a filling of knots with some gold dots.[9] The rim of the medallion is polylobed: it thus follows in simplified form a style observable in the *shamsehs* of the *Jāmiʿ al-tavārīkh* produced in the Rashīdiyyeh in 706–14/1306–14, where the inner rims of circles are formed by two intersecting polylobed rings, a fashion also reflected in illumination in the 730s/1330s under the Īnjū dynasty in Shīrāz. A rather different style is shown by the cover of a manuscript in the Türk ve Islâm Eserleri Müzesi.[10] This, signed by the binder Muḥammad ʿAlī, has been published by Sakisian as dated by its text to 734/1334 at Tabrīz, though Ettinghausen has expressed some doubt as to its contemporaneity.[11] The densely patterned filling in its broad and lobed mandorla may be related to the style of the *Manāfiʿ-i Ḥayavān*, but the attached pendants in the form of palmettes would seem to suggest a late 8th/14th-century date. A further problem is the much more prominent treatment given to the corners, which are quarter palmettes whose lobed outline is deeply notched in a manner derived from Chinese designs of 'cloud collar' type. To judge from illustrations to the Demotte *Shāh-nāmeh* this type of ornament was not current in Tabrīz so early. Another puzzling cover published by A.B. Sakisian is that to a *Kitāb Kīmiyā al-saʿādat*, copied in Shīrvān in 1379.[12] Though the patron for whom the manuscript was made was the Shīrvānshāh Māl Shāh Hushang the cover seems remarkably advanced for the ostensible date. The broad mandorla and the corners are stamped with an arabesque design, while the principle element of the border is a chain of lobe-ended cartouches filled with a floral scroll. This cover, which would not be out of place in the early 9th/15th century, contrasts with equally fine but characteristically 8th/14th century work in the frontispiece, where a strongly marked geometric system encloses small fields of rather naturalistic lotuses. If the two covers mentioned above are indeed of later dates than their manuscripts, it may be that motifs of the 'cloud collar' type should be attributed to early Timurid influences at the close of the 8th/14th century.

In this connection, an interesting cover is that to a volume of *Epics* in the Chester Beatty Library (pl. 5), which is usually dated to 800/1397 by a matching work in the British Library (pl. 6),[13] and which was probably made in Shīrāz for the then governor, Mīrzā Pīr Muḥammad, a grandson of Tīmūr. The central feature is now of diamond shape, but a diamond converted to a palmette cross whose broad arms are separated by small curving interstices in the 'cloud collar' manner. There are palmette pendants on the upper and lower arms of the cross. The corner-pieces are quadrants of a motif, similar, but not identical, to that of the centre, and they also have 'cloud collar' notches. The centre and corners are tooled with a double line of gold, as is a cable in the frame. The cross and the corner-pieces are filled with scrolls and flowers which bear a general resemblance to those on the Shīrvān manuscript of 1379, but with the important difference that they have been tooled freehand and not imposed with a stamp. If the stamping process had indeed reached Shīrvān in 1379 it seems most unlikely that it would not have been used in Shīrāz in 800/1397; it is much more probable that the 'cloud collar' design of the cover of the *Epics*, which matches textiles in its illustrations, betokens a fresh influence from the East.

From the early years of the 8th/14th century the decoration of various media in Persia had felt the effect of schemes of Chinese origin, which would have been transmitted by Chinese textiles and other items of trade. These schemes would tend to feature the lotus, but also – as in the pottery of Sulṭānābād – sprays of small leaves which, if not botanically accurate, were related to the lotus in decorative terms by a would-be naturalism in drawing and an intended random effect in the placing of the leaves. This type of decoration would for a time tend to submerge the clear and symmetrical traditional vegetal decoration of scrolls and palmettes of Sasanian and Classical derivation. This influence is seen in the illumination of Shīrāz and neighbouring centres for some three decades before and after 1400, where, though the lotus

2. *Qur'ān* of 292/905, outer cover. Ms. 1417c. Chester Beatty Library, Dublin.

3. *Qur'ān*, 6th/12th century, outer cover. 15.4.85, lot 183. Sotheby's, London.

4. *Manāfiʿ-i Ḥayavān* of 699/1299–1300, outer cover. M. 500. Pierpont Morgan Library, New York.



5. *Epics*, *c.*800/1397, outer cover. Ms. 114. Chester Beatty Library, Dublin.

6. *Epics* of 800/1397, 134 b, *sarlauḥ*: Or. 2780. British Library, London.

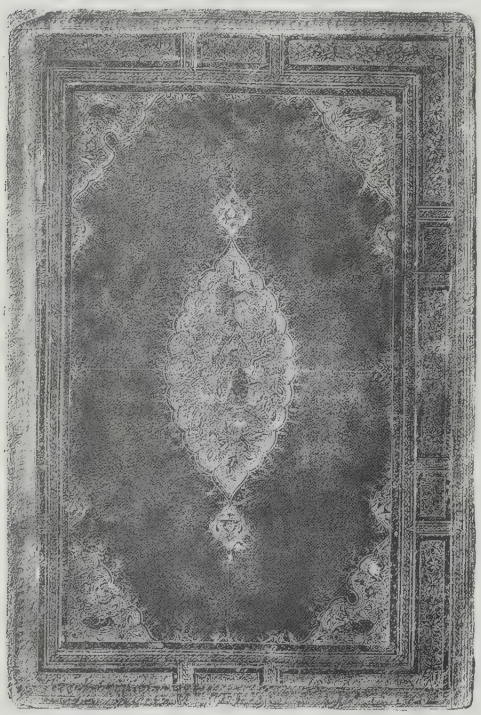


7. *Anthology of Dīvāns* of 840/1436–7, doublure. Ms. 2009. Türk ve Islâm Eserleri Müzesi, Istanbul.



itself is not prominent, sprays of small unoutlined golden leaves wander over fields of blue, or sprays with a hesitant 'naturalistic' outline wander over fields in reserve. A *sarlauḥ* in the British Library's volume of *Epics* is a fine example of the type (pl. 6).

8. *Dīvān* of Aḥmad Jalāyir of 805/1402 (?), outer cover. Freer Gallery of Art, Washington, D.C.



THE TRANSITION TO 9TH/15TH-CENTURY STYLE

At the outset of the 9th/15th century Sulṭān Aḥmad, the Jalayirid ruler of Baghdad, transformed the Mongol style of binding with an increase in ornament, and the incorporation of some chinoiserie and polychrome effects. The new style is seen in a *Dīvān* of Sulṭān Aḥmad of 809/1406–7 made at Baghdad.[14] The doublure has framing borders which include one of dense blind tooling in the Mongol manner, a central roundel rimmed with flamboyant chinoiserie cresting, and corner-pieces with notched 'cloud collar' designs; there is prominent use of double edging lines in gold, and the roundel and corner-pieces are in filigree over blue, gold and black. This style was evidently admired since it was closely imitated some three decades later in Yazd in an *Anthology of Dīvāns*, containing the works of various poets, with copying dates of 837/1433–4 and 840/1436–7.[15] The design of the covers of the two manuscripts seems to be identical; the doublures are very similar, but the Yazd example differs in the fore-edge flap, does not use black under its filigree, and in the doublure of the back cover reverts to the triangular corner-piece (pl. 7). Jalayirid styles in calligraphy and painting were closely imitated in Yazd in the 830s/1430s under the Amīr Chaqmāq, and it is probable that he was the patron of the work in pl. 7. The flamboyant Jalayirid style was to influence the bindings and illumination of both the Aq Qoyunlu and the Ottomans in their early period.[16]

As it happens, there is a possibility that another cover style of Sulṭān Aḥmad's was imitated in Yazd two decades earlier. The cover of Sulṭān Aḥmad's *Dīvān* (pl. 8) whose text is dated by a note to 805/1402, is of a very different character from the previous type: the effect is more sober, and a pictorial stamp with animals appears for the first time. The central motif of the cover is a smallish stamped polylobed mandorla in which, on a floral ground, a stag, to the left, turns to look at a hind. The animals run on the long axis of the stamp, and are thus sideways on to the manuscript. This may be simply a matter of pictorial

convenience, or it may be that the stamp was influenced by some other craft, for instance saddlery. The notched corner-pieces have rabbits on floral grounds. The borders include floral strips, like those on the Shīrvān cover; here, however, they are not in developed round-ended cartouches, but are interrupted and partitioned by portions of guard band. The binding of an *Anthology*[17] copied in 810/1407 in Yazd in a workshop which had lately been under the control of Iskandar Mīrzā, the youngest brother of Mīrzā Pīr Muḥammad, is made with identical stamps for the centre and corners, and the only notable difference is that the floral band in the borders is continuous. This is clear evidence of a link between the Jalayirid workshop and that of Iskandar: the element of doubt is whether the stamps which had made Sulṭān Aḥmad's cover came into Iskandar's possession, or whether, perhaps, Sulṭān Aḥmad's manuscript came into Iskandar's possession, and was bound either during his period of rule in Yazd, or later at Shīrāz and Iṣfahān. The difference from Sulṭān Aḥmad's other group of bound manuscripts speaks for the latter proposition. The doublure of the *Anthology* of 810 is more discreet in decoration than those in the Jalayirid group, and shows what may be the earliest use of animals in filigree (pl. 10). A palmette cross with pendants contains two jackals on a floral ground. There are two units of palmette in the first section of flap, and in the second section a portion of palmette cross containing two fishes. In a manuscript made for Ibrāhīm Sulṭān, who succeeded Iskandar as ruler in Fārs, the stag and hind motif is closely followed in filigree in the doublure, though the deer here face each other; their former place on the outer cover is taken by two Chinese cloud-deer.[18]

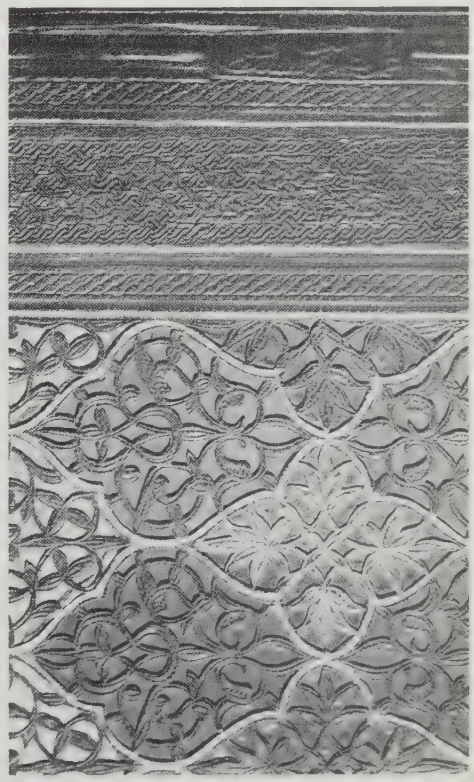
THE TIMURIDS AND TÜRKMEN

The second quarter of the 9th/15th century saw a brilliant period of book production in Herat under the Timurid Shāh Rukh and his sons. Shāh Rukh may have attracted artists from Samarqand, and certainly gathered them from the workshop of Iskandar in 817/1414; his son, Bāysunqur made similar acquisitions from Tabrīz in 823/1420. In the field of manuscript illumination the link thus established between Tabrīz and Herat brought new life to the traditional arabesque decoration, giving it a clearer and finer form than ever before. An example of this style is the *shamseh* of a history of Ḥamza b. al-Ḥasan al-Iṣfahānī copied for Bāysunqur by Jaʿfar al-Bāysunqurī in shaʿbān 834/April 1431 (see pl. 1). The colours are rich but sombre, blue, gold, black, white, green and brown. The green scroll under the legend is an inheritance from Tabrīz. The absolute clarity and controlled energy of the outer ring of arabesque on a blue ground would have made the leafy style of Shīrāz seem frivolous by comparison. The intermediate polylobed ring of white banding marked with minute black crosses is a feature which had been employed earlier, but which would develop into the more complex looping schemes which are characteristic of late 9th/15th century Herat. The outer cover of the manuscript has a stamped mandorla, gold at the rim and blind in the centre, with pendants. The corner-pieces appear to be painted with a few lines. The doublure echoes the cover with a mandorla of brown filigree over blue, green and gold, set into a maroon ground.

Writing in 951/1544 Dūst Muḥammad reports that among the artists acquired by Bāysunqur was a bookbinder, Qivām al-Dīn, to whom he attributes the invention (more properly the revival) of filigree, and a report exists of 830/1427 on work in progress by Qivām al-Dīn and his colleagues, but no binding definitely known to be by him survives.[19] Another binding for Bāysunqur which might be the work of this master is that to a *Jāmiʿ al-uṣūl* of Ibn al-Athīr copied in 839/1435–56.[20] The doublure, in filigree, has a mandorla centre and quarter mandorlas in the corners; the flap has a diaper of lobed diamonds. The front cover of the manuscript, which has a palmette cross within a wide mandorla, notched corner-pieces and a system of wide borders, one of which shows squares on angle, is densely decorated in floral and geometric patterns, and the back cover is finely stippled. It has been estimated that the decoration would have required 550,000 blind-tooled stamps and 43,000 gold ones, and that it would have taken five years to complete.

An undated copy of *Selected Works* (*'Khamseh'*) of ʿAṭṭār made for Shāh Rukh is in the same vein of traditional abstract decoration;[21] either as a work for the sovereign, or as a later piece, it is yet more complex than the *Jāmiʿ al-uṣūl*. The outer cover is in blind tooling with some gold outlines. The field has a diaper of lobed diamonds, enclosing arabesque, and the wide border is tooled with extreme intricacy and again includes squares on angle. The effect is suggestive of a textile or carpet. The doublure of the front cover is filigree in a diaper and has two very interesting features. Firstly, as Dr Ş. Aksoy has kindly pointed out to me, there is the signature of the *mujallid*, Niẓām Tabrīzī al-Sulṭānī. Secondly, some of the underlay of the filigree appears to be in a reddish lacquer (pl. 9). A companion volume, probably

9. *Selected works* (*'Khamseh'*) of ʿAṭṭār, *c.*841/1438, doublure (detail). Ms. 1992. Türk ve Islâm Eserleri Müzesi, Istanbul.







10. *Anthology* of 810/1407, doublure. H. 796. Topkapı Sarayı Kütüphanesi, Istanbul.

11. *Mathnavī* of Rūmī of 849/1446, doublure. Ms. 1906. Türk ve Islâm Eserleri Müzesi, Istanbul.

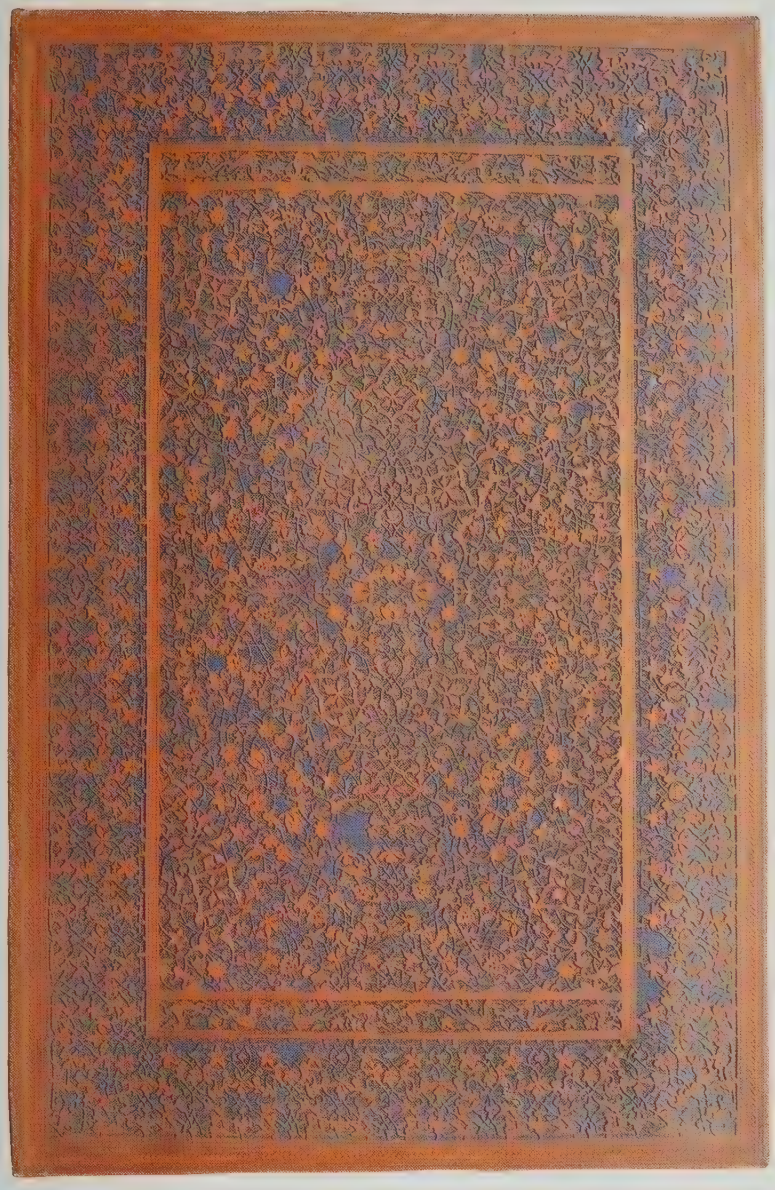
12. *Selected works* (*'Kitāb-i sittah* (?)') of ʿAṭṭār, of 841/1438, cover. A. III 3059. Topkapı Sarayı Kütüphanesi, Istanbul.

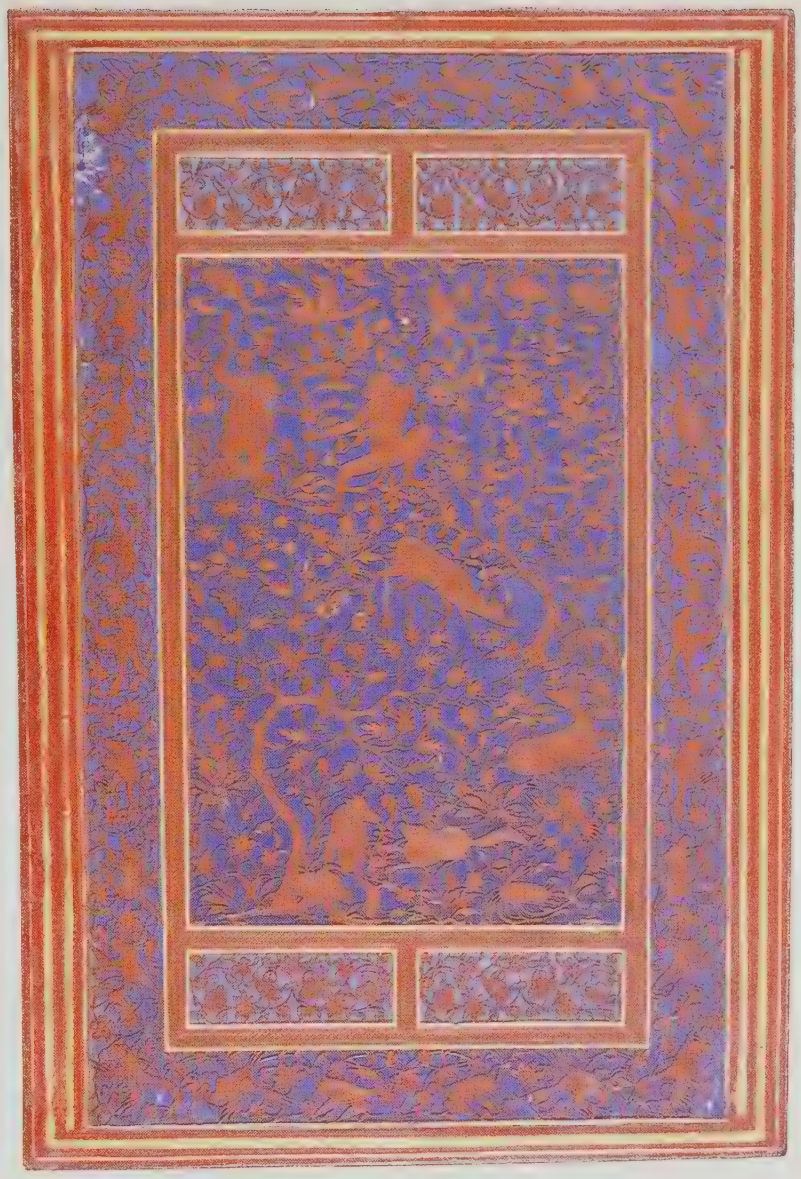


the later of the pair, with other works of ʿAṭṭār (*'Kitāb-i sittah* (?)') is of 841/1438 and has Shāh Rukh's titles tooled on the fore-edge cover. It has an equally splendid binding in the chinoiserie mode (pl. 12). The outer cover decoration seems here the product of a single stamp so large and complex as to be scenic in effect, though its elements are from the Chinese decorative repertory and relate to each other in a decorative manner, rather than in the spatial and narrative terms of illustration. A woodland is conveyed by leafy flowering trees whose branches seem to ripple in the wind; sky at the top of the composition is indicated by Chinese clouds and flying duck; and a stream at the foot is suggested by a stag who seems to drink. Between these the scene encompasses paired animals, natural and innocent or mythological and sinister, monkeys, gazelle, a hind with the stag, Chinese cloud-deer and dragons. The work necessarily draws from the accumulated skills of the past, but the contrast with cover designs of preceding centuries is remarkable. The envelope portion of the flap has fierce cloud-dwelling lions. The doublure has filigree over a blue ground with cloud-deer in a mandorla and birds, monkeys, gazelle, jackals, hares, and lionesses in the border. Both the ʿAṭṭār manuscripts are on Chinese paper, pink, ochre or lilac, with flowering branches or landscapes in gold.

The first binding to include human figures would appear to be that to a *Dīvān-i Jahān Khātūn* of 840/1437.[22] Since the poetess lived under the Jalāyirs, and the scribe has the *nisbah* Hamadānī, it seems probable that this is from western Persia. The front cover has a central mandorla in which a kneeling crowned man converses with a sitting woman, and the quarter mandorla corners have smaller kneeling figures. The flap has confronted lions. The figures, which are worked in gold and silver, are in the post-Muzaffarid style, and the lack of any Chinese model is apparent. In a *Khamseh* of Niẓāmī of 847/1443–4,[23] which is again west Persian in style, (but probably a gift to Mehmed II whose *shamseh* is in it), a rather clumsy human figure is introduced into a stamped cover scene. This same stamp is used again on the front cover of a *Mathnavī* of Rūmī of 849/1446.[24] The back cover is stamped with a magnificent pair of *sīmurgh*s, and these also appear in filigree in both the doublures, showing that the same stamp could be used in both procedures (pl. 11).

The *sīmurgh* mandorla in its turn is found again in a *Khamseh* of Niẓāmī of 853/1449–50.[25] This *Khamseh* has illustrations in a west Persian style, and if the manuscript were made in Shīrāz it would probably have been for Sulṭān Muḥammad, the son of Bāysunqur, in power there from 849/1445–6. The patronage of a *Dīvān* of Khujandī of 856/1452 seems to be shared by two Timurid brothers, the sons of Bāysunqur.[26] The very fine gold on gold *shamseh* on a golden *sarlauḥ* refers to Sulṭān Muḥammad, but the binding bears the name of Abu'l-Qāsim Bābur. It is tooled and painted in gold with a scene of monkeys, bears, and deer on the front cover, and on the back a mandorla with mountain goats, and notched corner-pieces with jackals. The doublure corresponds quite closely to the outside with filigree dragons in the mandorla and corner-pieces, and a filigree woodland scene in the flap. The outer cover has a glossy dressing which may be a step towards lacquer, if it is not a later treatment.





A patron of the mid-century who was not of the Timurid line was Pīr Būdāq of the Qara Qoyunlu. Illumination for him is characterised by an overall spread of very fine pattern, and this mode is also seen in the binding of a *Dīvān* of Qāsim made during his residence in Shīrāz in 863/1459.[27] This has a cover symmetrically patterned with Chinese clouds, and a doublure of filigree in a floral network of the most astounding delicacy and complexity (pl. 13). A copy of the *Khamseh* of Niẓāmī,[28] commenced under Pīr Būdāq but completed, and in all probability bound, in 881/1476 at the behest of Sultān Khalīl Aq Qoyunlu for his father Uzzn Ḥasan, shows the legacy of western Persia in the tendency to roundness in its central motifs. The outer cover has a very broad mandorla, is covered with small chinoiserie motifs, and has corner-pieces in the form of the tails of *sīmurgh*s. The doublure has a lobed circular medallion and similar quadrants in the corners; their filigree is over grounds of two blues and green. A *Shāh-nāmeh* of 899/1494 for Sulṭān ʿAlī of Gīlān follows the pattern of this doublure.[29]

From late 9th/15th century Herat a *Mathnavī* of Rūmī copied for the Timurid Ḥusayn Bāyqarā in 887/1483 has a magnificent binding which displays several important features.[31] The cover shows a mature use of lacquer technique. The lacquer is employed for the main field; the ground is black with golden fine-stemmed scrolls supporting composite flowers and curving leaves, forms which would continue into the 10th/16th century. The mandorla, pendants, corner-pieces, and a band in the border are counter-sunk, stamped, and gilded. The mandorla has a rim of brackets interspersed with lobes. The corner-pieces are of a new form: they are not notched, neither are they quadrants of the central motif; instead, they are ogee forms approximating to a *cyma*, with slightly lobed outlines. This type of corner-piece would tend to dominate from this time forth. The doublure resumes many themes of the earlier half century (pl. 14). The upper cover has filigree with a woodland scene dominated

13. *Dīvān* of Qāsim of 863/1459, doublure. Ms. 1986. Türk ve Islâm Eserleri Müzesi, Istanbul.

14. *Mathnavī* of Rūmī of 887/1482, doublure. Ms. 1905. Türk ve Islâm Eserleri Müzesi, Istanbul.



15. *Hasht Bihisht* of Amīr Khusrau of 902/1496, front cover. H. 676. Topkapı Sarayı Kütüphanesi, Istanbul.

by a pair of squabbling monkeys. The border has flying ducks in different postures. A scroll supporting animal heads (*vāqvāq*), in pairs of rectangular cartouches above and below the central scene, may be the first use of this motif in a binding. The inside of the lower cover, also in filigree over grounds in two blues, is non-figurative, having a medallion with palmette pendants, double-notched corner-pieces, cartouches with reciprocating merlons, and a frame containing shield-like units of arabesque. The field between the medallion and the corners is related to the cover by fine painted gold scrolls. The first section of the flap has a fine inscription, and the second a handsome dragon.

Tribute was paid to the Rūmī binding in a *Dīvān* of Navā'ī of 905/1500.[31] The sharkskin binding is ornamented in gold thread and blue silk. The corner-pieces are of the ogee form, and there is a border of flying duck. Meanwhile, a magnificent binding, lacquer outside and in, had been made for the *Hasht Bihisht* of Amīr Khusrau for Muḥammad Muḥsin, a son of Ḥusayn Bāyqarā, in 902/1496–7.[32] The cover is of black lacquer with crimson, red, and ochre, and details in gold; for some motifs the colour was enhanced by being laid over mother-of-pearl (pl. 15). The central lobed and notched mandorla shows two cloud-lions under a tree; and the palmette pendentives have crossed fish, a clear reference to the *Anthology* of 810. The ogee corner-pieces show a combat between a dragon and *sīmurgh*, and also a duck. The field is notched in the area of the corner-pieces, and, together with the border, is filled with scrolling vegetation of a chinoiserie type which is closely related to marginal illumination in an *Anthology* made for Iskandar in 814/1410–11. The doublure, using a black field and a golden border, combines a scheme of looping cartouches with a filling of chinoiserie scrolls.

16. Cover, *c.*1503. VIII.52. Keir collection, London.

From the outset of the 10th/16th century large gilded counter-sunk stamps were much used. This is seen in a cover in the Keir collection (p. 16). The central field of the top cover has a



scenic stamp with characteristically small figures. A king sits enthroned in a garden, angels hover overhead, and courtiers attend him. Some small details are rendered in colour. Rectangular stamped panels above and below elongate the field, and the border is composed of a succession of stamped cartouches. The back cover has a chinoiserie field. Robinson has dated this cover to *c.*1505–10 since the figures wear an early form of the Safavid headdress, the high cap around which the turban is wound being distinctly broad.[33] This dating is supported by a very similar cover of November 1503 published by Sagisian.[34] Robinson attributes the Keir cover to Shīrāz. Sakisian, not noticing the Safavid cap, attributed the 1503 manuscript to Herat. But it may be said that both pieces represent an interesting moment, not yet fully understood, when influences from Herat are detectable in work for the Safavids in western Persia at the very beginning of their rule.

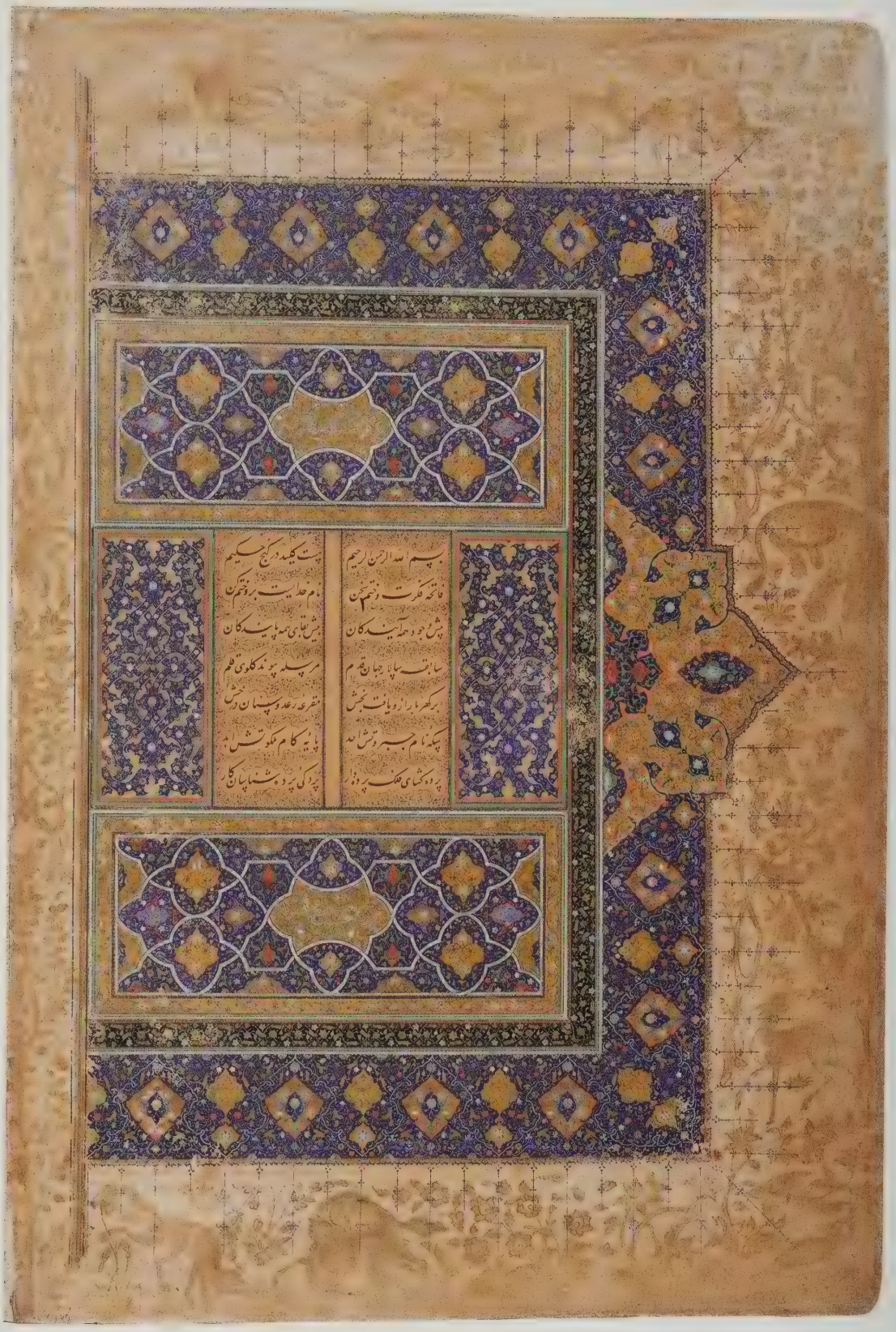
Both stamped covers show enthroned rulers, and hence may have been made for a patron with royal connections, but the extensive use of sunken golden panels is found in very many bindings of the 10th and 11th/16th and 17th centuries. Sometimes a large stamp is used for the field and plain leather is reduced to minimal dividing lines; sometimes there is an assemblage of stamps giving mandorla, pendants and ogee corner-pieces. The borders often take the form of a chain of cartouches, and if the manuscript is a Qur'ān these may be filled with texts. The doublures of this period show a corresponding tendency to overall decoration and colour. The filigree work in predominantly floral patterns may be carried out in gilded paper over grounds of blue, red, green, orange and black. Many examples were made in Shīrāz, but other centres were also active, though places of origin are not always easily determined. Designs tended to become conservative, and the evolution of styles is less clear than the varying degrees of opulence.[35]

Unmistakable influence from Herat is to be seen in the illumination of royal manuscripts made in Tabrīz in the second quarter of the century, as for example in the *sarlauḥ* of the *Khamseh* of Niẓāmī copied for Shāh Ṭahmāsp in 949/1543 (pl. 17). The fine colour and clarity of the drawing derive from the old Timurid centre, as do motifs such as the cartouches of looping bands, and the line of reciprocating merlons in the border. But the desire for yet greater splendour has increased the proportion of ornament to text beyond what was usual in Herat, and a new motif appears in the form of a broad-banded arabesque mesh in the side cartouches. The setting of text in clouds on a ground of thin floral work represents the renewal of a form previously characteristic of subheadings, and chinoiserie decoration finds a new place in gold drawings in the margins. In the early 11th/17th century this type of margin decoration is sometimes found transferred to the leather of the outer cover.

The use of lacquer was continued by the Safavids at Tabrīz. The ground colour is usually black, and gold, red, and green are used upon it. In some examples the field is filled with chinoiserie animals, corresponding to the scenic stamps and filigree of the 9th/15th century. In a number of fine examples, the human figure is introduced in courtly scenes, and facets of the decorative chinoiserie tradition, such as the black ground and the absence of a full landscape, combine with the figure drawing style of contemporary illustrations. A fine example of the second quarter of the century is the cover to a *Dīvān* of Navā'ī which shows a prince enthroned in a garden with his courtiers, and which is signed by Sayyidī ʿAlī Naqqāsh.[36] A large detached cover in a style of Mashhad of the mid-century shows a princely conversation in a two-storeyed pavilion.[37]

From the 12th/18th century the design of illumination tends to grow fussy and to become lost in a mass of detail, though this may be very finely executed. The results often suggest textiles. In the gold work on borders and covers there may be a contrary trend towards the use of rather large units of pattern such as the *ṣāz*, the feather-like flowering head of a reed, a motif lent to Turkey and borrowed back. Patterns of this type, however, suffer from the same lack of strong structure as the illumination, and the effect is often restless. In the late 12th/18th century a European influence may be detected when the *ṣāz* begins to develop a resemblance to acanthus. This tendency is seen in the lacquer cover and painted doublure of a Qur'ān of *c.*1800.[38] The composition of the doublure tells the same story, for though it has the classical components of border, corner-pieces, medallion and pendants, their proportion and lack of outline look distinctly alien. The most fruitful contact with European styles, however, is in the field of pictorial lacquer, in the late 12th/18th century under the Zands and, from the beginning of the 13th/19th century, under the Qājār dynasty (see chapter 16). Court or battle scenes are depicted, and these now correspond fully with the illustrative style of the time. Nevertheless, the interest in chinoiserie is not entirely extinguished as shown by the fine drawing in the lacquer doublure to a *History of the Zand Dynasty* of the late 12th/18th century (pl. 18)[39]. There are also lacquer bindings, made for a wider public, which use many-coloured flowers of European derivation on coloured grounds. An outer cover may show a posy with rose, carnation, iris, tulip, narcissus and hazelnut; the doublure

17. *Khamseh* of Niẓāmī of 949/1543, 2 b, *sarlauḥ*: Or. 2265. British Library, London.



18. *History of the Zand Dynasty*, *c.*1218/1803, doublure. Add. 24904. British Library, London.



has usually a single narcissus or iris against a different ground.

Though by the 14th/20th century the copying of manuscripts had been overtaken by printing, some traditional bookbinding was still being practised in the 1930s when Hans Wulff was carrying out his research into the traditional crafts of Persia.[40]

16 LACQUERWORK

THE STUDY AND appreciation of Persian lacquerwork is of relatively recent origin – the revival of interest in late Safavid, Zand and Qājār art dates only from approximately twenty years ago. Although its origins go back to the Mongol period and earlier, lacquer as an independent art form did not come fully into its own in Persia until the last two hundred years.

If we define Persian lacquerwork as small-scale watercolour painting on layered pasted paper, wood or papier-mâché which is then covered with successive layers of transparent varnish, then the earliest datable examples that exist in any number are bookbindings of the late Timurid and Safavid periods. Their decoration initially closely resembled that of leather bookbindings; and as a bookbinding technique lacquer painting was at first combined with stamped and gilded leather (see also chapter 15). Filigrane or lace-like cut-out designs in leather or paper were used on inside covers (doublures) which were commonly flapped. A fine example of this style is a bookbinding in pl. 1.

As the Safavid period advanced, bookbinding compositions became more painterly, mirroring the miniature styles and themes of the period. They were executed in either polychrome or gold on black, as in the earlier periods. Sometimes mother-of-pearl, as dust or inlay, is found. The favoured themes were court picnics, hunting, animal combats, landscapes; the favoured patterns, floral and arabesque. A magnificent bookbinding in the British Museum, datable to about 968/1560 (pls. 3a and b), not only sums up the style but also makes a further point: the inside and outside covers counterpoint and complement each other in terms of colour, theme and design, a tendency which will become a hallmark of the lacquer decoration of pen-boxes and mirror-cases in later periods.

Earlier writers assumed the existence of other types of lacquered objects from the period of Shāh ʿAbbās (995–1038/1587–1629) onwards: these included mirror-cases, pen-boxes, small chests, panels, and doors.[1] The date of many of these objects is now open to reinterpretation, in the light of what we now know of a very active school of 'archaizing' painters in 13th and 14th-/19th and 20th-century Iṣfahān, who catered to tourists' and collectors' interests in acquiring souvenirs.[2] The only securely datable body of lacquered objects of this period, besides bookbindings, is a large collection of painted and lacquered bows, dated from the second half of the 10th to the 12th/16th to the 18th centuries.[3] A recent survey of the miniature and manuscript production of the Safavid period reinforces one's suspicion that pen-boxes and other lacquered objects besides the bookbindings and bows referred to above did not exist before the mid-11th/17th century.[4] The earliest dated depiction of a recognisable lacquer penbox is in a miniature dated 1106/1694–5 and signed Yā Ṣāḥib al-Zamān, in Leningrad,[5] although actual extant examples can be found from the mid 11th/17th century onwards.

The making of the pen-box involved two steps: first the papier mâché or layered pasted paper base was prepared, and then was made to assume the shape of the object by the use of moulds. Once it was dry, it was given a coat of gesso (or plaster), sometimes even varnished at this stage, and then simply painted in watercolours. Gold was added in leaf or pulverised form if desired. Once the design was finished, repeated applications of varnish were necessary to achieve the impression of great depth and richness so prized by collectors. Detailed descriptions of this process can be found in modern works dealing with Persian crafts.[6]

The pen-boxes were rectangular with squared or rounded ends and large enough to house an inkpot, reed pens, brushes and other artists' implements inside. There are two types: one has a lid attached by metal hinges and chains which lifts up from the front; the other has an outer cover and an inside drawer which slides out. Paper and leather cut-outs were used for decoration inside the pen-box, on the rim, or even outside. Leather was also used for lining the inside.

Extant pen-boxes of this period are sufficient to illustrate the styles of most major painters

1. Bookbinding. Anonymous. From a manuscript of the *Hasht Bihisht* of Amīr Khusrau Dihlavī, dated 902/1496–7 at Herat. 39 × 26.5 cm. Topkapı Saray Library, Istanbul, H. 676.



of this period who worked in the Europeanising style, practised largely in Isfahān (see also chapters 13 and 14). However, the artists of the more traditional Rizā ʿAbbāsī school seem to have limited themselves to manuscript illustration and drawings.[7]

Much has been written about the painters Muḥammad-Zamān, ʿAlī Qūli Jabbādār and their imitators, which we will not recapitulate here. Suffice it to say that the style which they practised was easily applied to lacquer work with little or no modification. A new development originating in Safavid album painting may also be seen in their works: the naturalistic and minute depiction of flowers and birds that are independent of any anecdotal element.

Basically, we may discern three different ways of dealing with the surface of a lacquered pen-box. The first type uses figural scenes in the westernising mode in conjunction with secondary designs of floral scrolls or arabesques, the latter painted on the less visible parts of the pen-box. This is by far the most common composition; it entails the placing of figures wearing late Safavid, Mughal, or very general kinds of European 11th/17th-century costume on garden terraces or in misty landscapes, with cloud-streaked skies in which birds take flight. The figures are grouped in twos and threes, are often correctly drawn to scale and overlap; difficult stances are attempted; foreshortening and repoussoir elements (such as the broken tree-stump) are used, as if to show off the artist's acquaintance with these 'tricks' of Western illusionistic painting. Favoured leitmotifs include: small figures sketched in the background riding over bridges, tall trees grouped by twos or threes, vistas of trees, buildings with towers and arches in an unidentified architectural style (perhaps European via the Mughal painterly vocabulary), ruined arches, rocky hillocks in the foreground. Favoured themes are: hunting of boar and deer on horseback, amorous couples with musicians or companions, visits to old wise men (an Indianising motif often combined with Christian themes), scenes from the story of Khusrau and Shīrīn, and other love stories, and 'religious' subjects, such as Shaykh Sanʿan and the Christian maiden. The 'religious' scenes, however, were merely used as a pretense to display women in Western costumes and introduce Christian elements: they are not to be understood as devotional objects.

One of the most important pieces in this series is a rectangular pen-box with an inscription around the rim in cartouches, which contains the name of the artist, Muḥammad-Zamān, the patron, Shāh Sulaymān (1077–1105/1666–94) and the date in *abjad*, as well as in numbers: 1084/1672–3 (pl. 4). The main scene, a tripartite design of a meeting with a wise man, a rearing horse with attendants, and an imaginary seascape with a 11th/17th century galleon, is remarkable for its dream-like, almost Leonardoesque quality. A comparison of this pen-box with a miniature of a visit to Majnūn by Muḥammad-Zamān will show the similarity of painting and lacquerwork styles. Another good example in this series is a panel in 'tondo' form, signed by Muḥammad-Zamān and dated 1073/1662–3.[8]

The second compositional type combines minute bird and flower designs on the top or sides of the pen-box with figural landscapes. An oblong pen-box in the Īrān Bāstān Museum signed Muḥammad-Zamān and dated 1082/1671–2, has a design of three flowering trees with birds perched on their branches, an iris plant and small white flowers. The side of the box shows a carnation growing in fanning sprays; a hunting scene very similar to the 'tondo' example, is painted on the inside lid.

The third compositional type uses floral designs exclusively, either in the form of repeating flowering bushes or as overall designs of vine or floral scrolls and flowering branches. They are rendered in a manner at once naturalistic and poetically evocative of the eternal springtime beloved by Timurid and Safavid painters. A beautiful pen-box signed Ḥājjī Muḥammad and dated 1122/1710–11 is a superior illustration of this style.[9]

The production of lacquer bookbindings continued in the mid-to-late 11th/17th century but dated examples are rare compared to the number of extant pen-boxes. The designs are preponderately decorative and floral, not figural.

The late 11th/17th-century Europeanising school of Muḥammad-Zamān is considered by most authors to be the source of Zand and Qājār painting. This is certainly also true for lacquerwork as long as we define our terms: it is true that the Safavid repertoire of themes, compositional elements and compositions – including the mixing of landscape and portrait cartouches, portrait medallions on floral ground, hunting and figural scenes with floral and portrait cartouches, oval portrait medallions with floral bouquets above and below – were to become the stock in trade of later painters. Yet we shall see that these elements were often used in new and unusual ways attesting to the fact that later Qājār art was certainly not under the 'spell' of Safavid compositional inventions.

The style of Muḥammad-Zamān continued to be utilised into the early 12th/18th century, until the fall of the Safavid dynasty and the destruction of Iṣfahān by the Afghans in 1722. Among the known lacquer artists of this period we may mention: Muḥammad ʿAlī ibn Muḥammad-Zamān (his son), artists signing themselves Ḥājjī Muḥammad and Yā

Ṣāḥib al-Zamān (a punning signature signifying 'O Lord of time') ʿAlī Naqī ibn Shaykh ʿAbbāsī and perhaps his brother Muḥammad Taqī both working in an Indian idiom derived from their father Shaykh ʿAbbāsī.[10]

Despite the political instability following the Afghan invasion and the overall domestic decline in the period of Nādir Shāh (1148–60/1736–47), some art seems to have been produced. From extant examples we can confirm that not only do the painted pen-boxes remain popular but that the repertory of lacquered objects increases to include mirror-cases, circular and oval boxes, caskets meant for jewellery, for instance, and small panels that decorated larger objects from which they have now been detached. It would also appear that flaps and filigrane designs for the doublures of lacquer bookbindings fall out of favour.

The design most popular in this period was the 'small floral style' which was first seen on the Muḥammad-Zamān pen-box in the Iran Bastān Museum dated 1082/1671. It was an important style and it continued in popularity through the later 12th/18th century and has even had an 'afterlife', as an archaic style to the present day. These small-scale delicate designs show a profusion of flowers in bud or full bloom. We may easily distinguish roses, hazelnuts, tulips, carnations, and especially the leitmotif of a small clump of three or four white flowers resembling primroses. Often three to five medallions or cartouches would be superimposed on this design. Or the same medallions and cartouches, filled with flowers and birds might be set against a plain ground. Generally the compositional schemes are very refined and well adapted to the scale of the object, which is not always true in later periods. A good illustration of this style can be seen on a casket signed *'Zi baʿd Muḥammad ʿAlī Ashraf ast'* literally, 'after Muḥammad ʿAlī is the noblest' and dated 1153/1740 (pl. 2). This can be taken to refer to the prophet and his son-in-law or as referring to the painter himself and his teacher, who may or may not have been Muḥammad-Zamān. ʿAlī Ashraf's known works range from the early 1110s/1700s to the 1190s/1780s. A more conservative view would be to place his activity in the first half of the 12th/18th century. He seems to have been exclusively a lacquer painter. Another documented type of style was the scrolling grape-leaf design familiar from the Safavid period. A beautiful example is a pen-box dated 1148–9/1735–6 and signed Muḥammad Hādī.[11]

Curiously there is very little material to help us define the figural style of the period. We can only extrapolate from the cartouches and medallions on lacquer wares, used in conjunction with the small floral style and from rare watercolours and marginal drawings. The style continued Safavid trends with some slight changes in costume, such as the '*Nādirī*' man's hat, and the somewhat heavier proportions of the women.

As to bookbindings these seem to have been either scrolling vine types or small floral patterns in the ʿAlī Ashraf style. An exquisite example of the latter type is the cover of a royal album of Mughal and Persian watercolours, compiled in the 12th/18th century, and now in Leningrad. It is dated to the years 1117–51/1734–8, and was painted by both ʿAlī



2. Mirror Case. Signed by ʿAlī Ashraf and dated 1153/1740–1. Royal Museum of Scotland, Edinburgh, No. 31.











3. (*facing page*) Bookbinding. Anonymous. *c.*968–1560. 40 × 25 cm. British Library, London, no. 1948.12.11.027. Front: garden scene; back: hunting scene

Ashraf and Muḥammad Hādī.[12] The cover itself is particularly interesting as it illustrates the interchangeability of the designs of this period for it is almost identical to a casket in the Iran Bastan Museum. The marginal designs of this album are a veritable treasure trove for the signatures of Muḥammad Baqīr and Muḥammad Hādī and Muḥammad Ṣādiq. We know very little of their careers but are able to situate their activity from the 1140s/1730s through to the end of the century. There is also evidence that Baqīr continued his career at the court of Fatḥ ʿAlī Shāh.

4. Penbox. signed by Muḥammad Zamān and dated 1084/1672–3. 24.5 × 5 × 4 cm. Private collection.

Although works in the style of ʿAlī Ashraf and his contemporaries continue to be produced late into the 12th/18th century we also see the appearance of a new style associated with the reign of Karīm Khān Zand in Shīraz (1163–93/1750–79) (pl. 5). Karīm Khān Zand actually ruled as regent for a puppet Safavid prince. This sense of political continuity may extend to the arts, explaining why Zand painting produced no revolutionary formal or thematic changes to compare with the late Safavid styles. In terms of media, we can also say that it continued the tradition of large-scale mural and oil paintings begun in the late Safavid period. Easily recognisable new facial types and changes in figural proportions and costumes continue to be seen. In general the women's faces are round and full-cheeked, with wide 'doe eyes' and centrally parted hair. Their bodies are quite plump and they wear transparent blouses and embroidered, striped, wide trousers, sometimes topped by a knee-length tight fitting coat (see Chapter 14). The head is covered with a small cap and/or aigrette with a long scarf attached. The men are usually clean-shaven and round faced. Their heads either sport the high Zand turban, an Astrakhan hat, or a small cap with a few wisps of hair peeping through. They usually wear a long-sleeved fitted overdress with a cumberband at the waist. The body proportions are again rather stocky.

Although the figures are well modelled and logically placed in relation to each other, the landscapes and architectural settings inherited from the Safavid period are sometimes oversimplified. The Persian painter never really grasped the finer points of the Western aesthetic and from the 12th/18th century onwards merely grafted them on to compositions that used



5. Bookbinding. Anonymous *c.*1163–93/1750–79. From a manuscript of the *Tārīkh-i Gītī Gushā* (History of the Zand Dynasty) by Mīrzā Muḥammad Ṣādiq Mūsavī Nāmī Iṣfahānī. Front cover. 19.7 × 12.7 cm. British Library, London, Add. 24904.

a basically Persian vocabulary: this was non-realistic, decorative painting used as illustration. The basic weaknesses of the 'Westernising' style as practised by the late Safavid and Zand painters were emphasised as the original European sources of inspiration were not renewed. It should not be forgotten that at this time Persia existed in cultural and political isolation from the Western world. The only extensive contact with another country occurred during Nādir Shāh's campaigns to India which must obviously explain the popularity of Mughal iconography from this period onwards.

The Zand style can still be appreciated for its fine detailing, intimate atmosphere and poetic qualities, factors that made the lacquerwork of this period particularly successful. Miniatures and manuscripts of this period are rare and therefore lacquerwork takes on a special importance as a research tool for establishing the Zand figure style when used in conjunction with the study of contemporary oil and mural painting. One artist in particular who seems to have developed this figure style was Muḥammad Ṣādiq, who worked in all the media. His influence in later years was so pervasive that the entire Zand style has become synonymous with his name and a great number of works by different hands have been attributed to him. If we accept all the dated pieces as being by him, Ṣādiq's career would range from the 1140s/ 1730s to the 1200s/1790s, again a rather improbably long time. There is therefore a regrettable confusion as to his authentic paintings.

An important transitional example of this period is a small unpublished circular box. The outside is painted with birds and flowers in the ʿAlī Ashraf style whereas the inside depicts a young woman in early 12th/18th-century costume similar to the costumes on a casket cover in the 1126/1714–15 and signed *Yā Ṣāḥib al-Zamān*.[13] The box is signed with a punning signature '*Ṣādiq az lutf ʿAlī Ashraf shud*', 'Ṣādiq became royal through the grace of ʿAlī', which seems to invoke the name of ʿAlī Ashraf as teacher and stylistic source. Although undated, we may place it at the beginning of Ṣādiq's career due to the similarity of the costumes mentioned above.

A later example is a mirror box depicting a hunting scene on the front cover. The inside and back covers show amorous couples on a terrace, a favoured theme of this period. Here the box is signed '*Yā Ṣādiq al-Vaʿd*', 'O thou who keeps thy promise', an invocation to the namesake of the painter, the Imām Jaʿfar al-Ṣādiq. It is dated 1189/1775–6 (pl. 6). Finally, an octagonal mirror case signed '*Yā Ṣādiq al-Vaʿd*' and dated 1207/1792–3 illustrates an important point: that what is considered as the 'Zand' style continued well into the early Qājār period.[14]

Before we embark on any discussion of Qājār lacquer we should mention the existence of two 'transitional' styles particularly puzzling to the student of 12th and 13th/18th and 19th-century lacquer. The first of these is a basically continuation of the Zand style portraying the first two rulers of the Qājār dynasty: Āqā Muḥammad (1207–12/1794–7) and Fatḥ ʿAlī Shāh (1212–49/1797–1834). Most of these examples are painted in the 'small figure style' and are unsigned and undated.[15]

The second type should more aptly be termed a 'compositional type' rather than a 'style': it depicts groups of the Holy Family with Saint Peter or Shaykh Sanʿan and the Christian Maiden, beginning in the late 12th/18th century and continuing virtually unchanged until the end of the Qājār period, except for an obvious decline in quality. This type of 'Christian veneration scene' is combined with hunting, Indianising scenes or visits to holy men with slight variations in style according to the period. They are extremely difficult to date and are attributed to artists ranging from Muḥammad Ṣādiq to Muḥammad-Zamān II (an artist of the Fatḥ ʿAlī Shāh period) and to Āqā Najaf, a mid-13th/19th-century painter. Hallmarks of the style include details such as gold ewers, peacocks in the foreground, draped columns against a landscape background, and vaguely Queen Anne period costumes for the women.[16]

The 'small figure style' eventually developed into the grander richer 'court style' of Fatḥ ʿĀlī Shāh, who provided a great deal of artistic patronage, particularly in manuscript production and life-size paintings. As the main purpose of this style was to impress the viewer with the current ruler's power and legitimacy, it is distinguished by a rather cold magnificence and loses the charm and intimacy of the styles of the earlier periods. Formally and thematically there is little change except for a certain lengthening of proportions and a further codification of the style's components. The men now tend to be bearded and their tight-fitting coats are often bejewelled. The same is true for the women who wear jewelled epaulets and arm bands. Their pantaloons are replaced by full skirts with jewel encrusted hems.

Compared with the other arts there seems to have been less of an emphasis on lacquerwork in this period. Fatḥ ʿAlī Shāh was more directly involved with manuscript production, and therefore most of the datable examples of this period are bookbindings such as the impressive binding with hunting scenes by Muḥammad Baqīr and Sayyid Mīrzā that he





6. Mirror Case. Signed by Muḥammad Ṣādiq. Dated 1189/1775–6. 26 × 18.5 cm. Victoria and Albert Museum, London, No. 763–1888.

commissioned to replace the original binding of the famous 946–50/1539–43 *Khamseh* in pl. 7. The most important artists, however, are rather poorly represented in this medium while many, such as ʿAbdallāh Khān or ʿAbu'l-Qāsim, are not represented at all. A notable exception to this rule is a beautiful casket signed by Mīrzā Bābā and dated 1218/1803–4. In its individual parts and *in toto* it illustrates almost all the leitmotifs of this period. The design of birds perched in flowering bushes is particularly beautiful.[17]

Although hunting and royal reception scenes are still popular compositions for bookbindings, the early 13th/19th century witnesses the appearance of a new floral style.[18] It consists of either a repeat pattern of flowering large-scale bushes, mostly roses, intermingled with birds and butterflies and other varieties of flowers such as carnations, hyacinths, bluebells, fruit blossoms or a single flowering bush or a free floating bouquet of mixed flowers. This design occupies the whole field. Usually there is a multiple scroll or cartouche border. There may also be spandrels with arabesque decoration. The doublures usually showed a single iris or hyacinth plant on a plain ground or a stylised gold scroll design reminiscent of the 12th/18th century. Other simpler compositions of the Leningrad album type, with small escutcheons or medallions on a plain ground, still occur sporadically.

The reign of Muḥammad Shāh (1250–64/1834–48), grandson of Fatḥ ʿAlī Shāh, produced no consistant and easily recogniseable style of its own in lacquerwork; on the contrary, it simply continued to use the already weakened royal style of his grandfather. But it now becomes notably more angular, linear and simplified; less and less modelling is used for faces and forms and the colours lose their brilliance. As the old style dies out, an artistic 'turning-point' is reached in which three far-reaching new trends can be seen.

First is the re-emergence of the old Persian tradition of copying a master, 'archaizing', as it has sometimes been called, but now it is no longer limited to an isolated manuscript or an individual painter but becomes a legitimate style in its own right, with its own 'school' of painters. We are speaking here of Āqā Najaf, also known as Najaf ʿAlī, who worked in the Safavid and Zand styles, long after they had died out (pl. 9). As with Muḥammad Ṣādiq, his authentic works are extremely difficult to pin down, and there are at least four different styles associated with his name. Almost all his works are signed with the punning signature, '*Yā Shāh Najaf*', '*O King of Najaf*', a reference to the Imām ʿAlī, son-in-law of the Prophet, and are dated to the 1250–60/1840–50s. His period of activity, according to his signed works, ranges from *c.*1230/1815 to the 1270s/1860s. Difficulties in attribution may be a result of the fact that a very large school of lacquer painting is associated with sons of Āqā Najaf, and they not only worked in his style, but used his signature too freely. As in the case of Muḥammad Ṣādiq, great fame has also brought great confusion for today's connoisseur.

The second trend to be seen is in the painting of Abu'l-Ḥasan Khān Ghaffārī, known as Ṣanīʿ al-Mulk, and his school where a new concern with psychological realism, even caricature is apparent. Unfortunately we know of no signed examples of his style in lacquerwork and must turn to the work of another fine painter, Āqā Buzurg Shīrāzī, for an illustra-



7. Bookbinding. Signed by Muḥammad Baqīr. Early 13th/19th century of the *Khamseh* of Niẓāmī of Ganja, executed 946–50/ 1539–43. 36.9 × 25.4 cm. Or. 2265.

tion of this type of work. The pen-box in pl. 8 depicting important men of Shīrāz, is signed by him and dated 1269/1852–3. It also has a self-portrait at one end of the pen-box, and is particularly notable for its incisive portraiture and for the fine textile detailing.

Thirdly, there is a new interest in the historically exact depiction of local events such as military campaigns or meetings of identifiable historical personages, such as occurred between the Crown Prince Naṣr al-Dīn Mīrzā and the Russian Tsar Nicholas I in 1253–4/ 1838.[19] These types of themes were treated most successfully by the painter Muḥammad Ismā'īl, Āqā Najaf's brother, who worked in a miniscule and immensely complex style, employing 'a cast of thousands' in his battle scenes. His masterpiece is a box dated 1288/1871–2 which shows the siege of Herat (pl. 10). This sense of historical verity is paralleled by the beginnings of newspaper printing and lithograped books, as described in the section on post-Safavid painting of this book. In a lesser vein, Muḥammad Ismā'īl's work is characterised by a strong infusion of contemporary Western iconographical sources: his European women now wear costumes of the early Victorian era, sun-bonnet and all, and

8. Penbox. Signed by Āqā Buzurg Shīrāzī. Dated 1269/1852–3. Museum of Decorative Arts, Tehran.







9. Penbox. Signed Yā Shāh-i Najaf for Najaf ʿAlī. Mid-13th/19th century. Museum of Decorative Arts, Tehran.

10. Casket. Signed by Muḥammad Ismāʿīl. Dated 1288/1871–2. 32.3 × 26.3 × 11.6 cm. Historical Museum, Bern, No. 71/13.

the men wear frock-coats, which were just beginning to be adopted at this time. Yet again, these sources are used in a most wonderfully naive, almost childlike way, and his visions of Europe seem to be made for an uneducated public that was interested in the most obvious aspects of a culture with which they were just coming into direct contact – its fashions, women, its modes of transportation, such as steamboats, trains, suspension-bridges, carriages. Muḥammad Ismāʿīl's style is very easy to identify, unlike that of his brother.





11. Casket. Signed by Naṣrallāh al-Ḥusaynī al-Imāmī and dated 1282/1865–6. Nigāristān Museum, Tehran, No. 75.6.17.

12. Penbox. Signed by ʿAbbās Shīrāzī and dated 1297/1879–80. Made for Nāṣir al-Dīn Shāh. Museum of Decorative Arts, Tehran.

Favoured leitmotifs are: carriages, small puppet-like figures, doll-like faces, heavy scrollwork separating the various events depicted. His career spans the 1250s/1840s to the 1280s/1870s.

Finally, specialists such as Naṣrallāh al-Ḥusaynī al-Imāmī (pl. 11), Luṭf ʿAlī Shīrāzī (also known as Ṣūratgar) and Fatḥ Allāh Shīrāzī, continue the bird and flower tradition first associated with Muḥammad-Zamān. Their works are of a consistently high quality, very delicate, and can often be compared to the finest floral work of the Safavid period.

The tendencies represented above coexisted with the fully-blown style primarily associated with Nāṣir al-Dīn Shāh (1264–1313/1848–96) although it continued until the end of the Qājār dynasty in 1924. This long-living ruler was a connoisseur and patron of the arts like his grandfather. His extensive influence did not take the form of large mural commissions or rock-reliefs, but rather his personal and rather mediocre taste was stamped upon all the arts of the period, especially lacquerwork. In short, we are dealing with a consummately Victorian style, that was sentimental, ornate and eclectic in its sources.[20] Hallmarks of the style are: gold scrollwork, hazelnut-blossoms, deer and parrots in roundels, rustic peasant scenes used on the sides of the penbox, and floral bouquets used as interstructural decoration among others. The later costume is also distinctive; men are again clean-shaven or have handle-bar moustaches; they wear frock-coats and wide pants and very high Astrakhan hats. Women's skirts become especially voluminous. Or they are dressed in identifiably Victorian costume. Facial types are either low-browed and moon-faced, or frankly European.

The second half of the 13th/19th century sees the emergence of schools of lacquer painters who worked almost exclusively in this medium. Among others are the three sons of Āqā Najaf, Kāzim, Aḥmad and Jaʿfar, who also did enamelling, however; Muḥammad Ismāʿīl's son, Ḥaydar ʿAlī; ʿAbbās Shīrāzī (pl. 12) and his followers; ʿAbd al-Ḥusayn Ṣanīʿ Humāyūn; Muṣṭafa Imāmī (one of the at least eight members of the Imāmī family) and Simirūmī in the late 13th/19th and early 14th/20th centuries. It is a pity that in spite of this incredible variety of artists and schools, their styles are too often interchangeable and show a monotonous repetition of motifs and compositions. At the same time, Westernised iconography is derived from cheap 13th/19th-century export wares ranging from Bohemian glass, Russian, German and English lacquerwork to popular prints and newspapers. Persia had now opened the economic floodgates to the West and no longer did artists have to depend for inspiration on second-hand Safavid copies of mass-produced, 10th and 11th/16th and 17th-century European prints. Characteristic of the lacquerwork of this period is the uneasy and often illogical mixture of badly assimilated aspects of popular Western culture with more traditional Persian motifs.

We now also see the development of new types of themes appropriate to the compositional organisation and small scale of the penbox, whereas the Safavid and Zand painter mainly simply reduced his composition. Favoured themes are marriage scenes, the amorous adventures of Bahrām Gūr, and the loves of Khusrau and Shīrīn, all of which pandered to the Persians' taste disguised erotica. Battle scenes, legendary kings and their courtiers, pastoral scenes, and manuscript illumination designs now applied to lacquerwork, all reflect the Persians' taste for the miniscule and ornate. Scenes of the Madonna and Child, simpering Victorian women in roundels and foreign cityscapes mirror their fascination with Europe; depictions of the Day of Judgement, portraits of sufis and dervishes, and devotional pictures of the Imām ʿAlī and his sons show a new interest in Muslim religious painting.

Finally, from the early 14th/20th century to the present, an 'archaizing' style in the Safavid manner emerges, which uses heavy patterning and mixes stylistic elements from different chronological periods of the 10th and 11th/16th and 17th centuries. This style is most often associated with the Imāmī family mentioned earlier, and various artists of the Iṣfahān bazaar. Unfortunately the Persian painter's technical standards and ingenuity are not always matched by his probity, and forgeries abound.

Generally speaking, there is a truly bewildering array of styles, artists and themes visible on these penboxes. The dominating surface organisation is, however, now reduced to a series of cartouches and ovals (originally and sparingly used in late Safavid examples) with much gold scrollwork and filling motifs between them. All thematic elements were simply placed in the compartments and the figures were either reduced to a minute size or uncomfortably squashed. This organisation eliminated the problem of second-rate landscape painting and permitted the mass production or 'assembly-line' technique to develop. Usually, single figure types were made to be read vertically, and multiple figure scenes and floral compositions horizontally.

In terms of technique and shapes, a complex situation remains whereby penboxes predominate but many new objects are also added to the repertory: instrument-cases for barber's equipment, spectacle and stamp cases, snuff-boxes, large chests, powder-horns, musical instruments, playing cards, cosmetic stands, rulers, cradlebars, and *qaliyāns*,

waterpipes. We see the use of embossing on the rims of caskets and the drawers of pencases. Sometimes floral designs are in relief, ,and a stippled painting technique, *pardāz*, is popular. Another popular design is the *abrī* or cloud design, which consists of a series of almost anthropomorphic clouds on the top of the penbox. Extant dated examples can be found from the 1270s/1850s onwards – many are signed by the artist Abū Ṭālib.

The most important development, however, was the artists' increasing reliance on the use of shortcuts and 'mechanical' means to produce their designs. Although tradition has it that the floral designs were always executed in freehand it seems that once the general design had been outlined, a pounce was used to eke out the rest of the composition. A collection of pounces in Tehran used by Luṭf ʿAlī Ṣūratgar shows that compositional elements ranging from late Safavid through the Zand and Fatḥ ʿAlī Shāh periods were at the disposal of this painter and his students.[21]

Another point to keep in mind is that just as a manuscript would be the product of co-operation between the painter, gilder and bookbinder, so often the pencase was the product equally of the portrait painter, the floral and arabesque designer, and the gilder. This is especially easy to detect in the work of the Najaf school, or of ʿAbbās Shīrāzī and his co-workers. Or again, the head of the atelier would do the main design and his students complete it, or two artists of equal stature would work on the same object. In this last case there might be only one signature or none at all, which is most often the case.

The resulting discrepancies in style on a single object all make artistic attributions difficult for scholars working in this field. A further difficulty is presented by the tradition of re-using older obviously treasured elements on new pieces, a practice called '*naql kardan*'. Sometimes the fit is so exact and the rest of the object is decorated in so harmonious a style that it is very difficult to detect. Dating is further complicated still by the use of punning signatures; by the veneration, by imitation, of a master's style; by the extremely long time-lapse before new Western sources would be used; by the very clever falsifying of dates and signatures; and by later attributions masquerading as authentic signatures. Even shapes are not helpful in dating, as they can only provide a *terminus post quem* but never an *ante quem*.

In conclusion, we have tried to show that lacquerwork comes into its own as an independent art form in the late 11th/17th century, continues for a good 200 years reaching its peak in the mid/13th/19th century, and then declines into the very capable imitations of today. In the most general way, the study of these objects and their relationship to the other arts of the period has shown that lacquerwork mirrors the stylistic developments of the 'major arts', although in a more intimate and small-scale way. Obviously some stylistic developments were exclusively due to the shape of the object and its inherent limitations, or to an increase in demand, which led to the 'assembly-line' technique and style in the later periods.

There can no longer be any doubt that after the Safavid period the best 'miniature' work of the period is actually produced in 'lacquer' and we should view this medium as the bearer of the finer qualities of Persian miniature painting. We can also no longer afford to ignore that lacquerwork is a veritable encyclopaedia of later Persian artists' names and styles of the last 200 years.[22] Further detailed study of its manifestations will undoubtedly unlock many more mysteries of Persian art.



17 CERAMICS

INTRODUCTION

Since Arthur Upham Pope's study fifty years ago of Persian ceramics in the *Survey of Persian Art* we have come, paradoxically, to know rather less about the subject. Virtually all the pottery acquired by Western museums since 1298/1880 has been the product of commercial excavation, usually with unreliable dealers' provenances: the European fashion typified in the late 13th/19th century by Richard's collection of pottery from Rayy made it convenient and profitable to ascribe any material of dubious provenance to Rayy, or, in the case of divergent or suspect material, to 'provincial' centres in Central Persia. Wasters, which appeared to provide solid evidence of local manufacture, have also had to be re-evaluated:[2] for example, the 'Rayy' lustre waster in the British Museum, acquired indirectly from Richard, was arguably not a waster at all. More specifically, virtually any pot, however damaged in the kiln, could be sold, so that an apparent waster at a site is evidence for local manufacture only if the kiln where it was fired can be identified. Kiln finds to date have not produced material relevant to the history of the classical Persian luxury wares; and where kiln areas have been conscientiously investigated, as at Marv or Afrāsiyāb[3] it has proved difficult to distinguish between staple products, chance imports and the experimental production of certain wares abandoned before they could be marketed on a large scale. Hence the conflicting claims among Soviet archaeologists that principal luxury wares were manufactured on the sites they have excavated.

The problem of identification is in fact threefold: few kiln sites for the principal wares collected by museums have yet been established; excavations, for example at Rayy and Gurgān, have produced kiln material for coarse or local wares which are difficult to interpret; yet dealers continue to give site names to the pottery they sell with some conviction. Kilns which produced local wares will, certainly, be ultimately relevant to the history of the Persian pottery industry. However, up to the present, museums, like dealers, have treated Persian pottery primarily as an art form, collecting luxury wares, which even at the height of their popularity were probably not widely diffused and may well have been experimental. Though there is as yet no way of putting them in their proper perspective, they must, inevitably, be the stuff of the present account.

There is no easy alternative to using site names, like 'Rayy', even when, like 'Sāveh', they do not appear to identify a homogeneous category. It should be unnecessary to observe that this usage must not be construed as giving geographical specificity. Much 'Sulṭānābād' pottery, Reitlinger has observed,[4] may be from Kāshān, and where the rest of it was produced remains a mystery. Northern Persian potteries are even more problematic. The abundance of later 6th/12th-century 'Garrus' or 'Gabrī' wares in the finds at Takht-i Sulaymān[5] may be taken *pro tanto* as evidence for their manufacture in northern Persia. However 'Aghkand' champlevé and polychrome stained pottery (6th–7th/12th–13th centuries), named after a town south of Tabrīz, is of most recent occurrence in Soviet Āzarbāījān (Ören Kale/Baylaqān)[6] and even in Georgia (Dmanisi and Urbnisi)[7] and may not have been made in northern Persia at all. It has sometimes been suggested that Tabrīz, a political and economic capital from the 7th/13th to the 10th/16th century, was a pottery, but this is no more than speculation. Temporary kilns could, certainly, be set up for a particular job, like those at Takht-i Sulaymān, evidently worked by a gang of Kāshān potters,[8] to execute the tiles for the palace of the Īl-Khān, Abaqa; but fine pottery and large pieces demand better controlled firing conditions if the proportion of wasters is not to be excessive.

The chronology of most Persian pottery is also very obscure. Dated pieces, which are few and mostly tiles, give little idea of when first or how long the type was made, and it is sometimes impossible to suggest a span within a century. The history of the presumed potteries is thus defective in the extreme. There is evidence of an established Islamic industry

1. Shallow bowl painted in polychrome enamels and with coloured staining in opaque whitish glaze with a scene from the campaigns of the last Khwārazm-shāh, Jalāl al-Dīn. On underside frieze of huntsmen. Iran, about 625/1230. Freer Gallery of Art, Washington D.C., 43.3.

3. (*facing page*) Small jug with fluted neck and sharply moulded reliefs of palmettes on belly under red slip. Excavated at Susa by R. Ghirshman 1949. Musée du Louvre, Paris, MAO S. 221.

by AD 800. Initially it is difficult to separate the 'Two Iraqs' (Mesopotamia and south-west Persia) of the early Islamic geographers. However, even before the fall of the Buyids in 429/1037, there is evidence of independent production at Susa, while Nīshāpūr (with associated potteries at Marv[9] and Afrāsiyāb/Samarqand[10]) had come into prominence in the east, though the disturbances of the mid-6th/12th century were probably as deleterious as the Mongol invasions of the 7th/13th. From about 566 to 700/1170 to 1300 Kāshān dominates the potteries of central Persia, though its kilns have never been discovered. By the 10th/16th century Kirmān and Mashhad and a number of provincial towns are credited with the production of fine pottery. So much is reasonably clear. But this skips centuries and omits, for example, all Khwārazm, Farghāneh (roughly coextensive with Soviet Kazakhstan), Bactriana, most of Transoxania and the rest of Afghanistan.

Until the medieval trade-routes of eastern Persia and Central Asia have been thoroughly investigated it is probably injudicious to pronounce upon them. However, for most of the period 414–1214/1000–1800 the main Persian potteries seem to have been within the confines of present-day Iran. With the exception of fine wares of 'Nīshāpūr' type made further east and of fine unglazed wares, which were widespread, kiln material from, *inter alia* Gurgān,[11] Ören Kale/Baylaqān in Soviet Āzarbāījān, Ānī[12] and Dvīn/Dābil,[13] Shahr-i Qūmis, Sulṭāniyyeh and Varāmīn, is virtually all of secondary importance, either hitherto unrecorded types or inferior local imitations of finer wares, none of which are directly relevant to the dating of the finer 'metropolitan' wares already known.

The location of medieval potteries in Persia was not haphazard. The sources of clay, and even fuel, are localised and trade routes difficult to change. Though quartz for the later composite bodies may have been exported, the only evidence for the export of clay is a reference in Idrīsī to white earth on the shores of Lake Van in eastern Turkey,[14] which was apparently used for making vessels for liquids in Iraq, Egypt and Syria. Once a pottery always a pottery, therefore. The demonstrable facts show that the picture was far more complicated. Kāshān, like Raqqa and the Euphrates potteries, has no industrial history before the late 6th/12th century when it suddenly appeared as a quasi-monopolistic producer of luxury wares. Its potters, particularly, perhaps, the makers of lustre-painted tiles (see Chapter 18), gave the proprietary name *kāshī* to tile-work and pottery even in 8th–9th/14th–15th-century Central Asia. The minimal finds of lustre ware in Afghanistan (from Ghazni, principally a cache from a house, now in the Kabul Museum[15]) and of lustre and *mīnāī* in Central Asia (one *mīnāī* base from Urganj and a handful of fragments from elsewhere in Khwārazm[16]) are further evidence that Kāshān had at this time no competition and that relatively little of the output of the central Persian potteries in the 6th–7th/12th–13th centuries went further than the main north-south trade routes.

This is an illustration of how difficult the traditional trade-routes were to change. Hence the vulnerability of potteries to large-scale population changes, like those which followed the Mongol invasions of 1220–1. Afrāsiyāb in particular, and Central Asia in general, produced no fine pottery at all after being overrun by the Mongols. Pottery finds in Farghāneh, the Lands of the Golden Horde, Khwārazm and the Oxus-Jaxartes sites of Uzbekistan though numerous, are all inferior local wares without export potential. The composite frit-wares of the late 5th–6th/11th–12th centuries made from Kāshān to Nīshāpūr were not apparently manufactured on a large scale in Transoxiana and Khwārazm during that period. But even in Nīshāpūr, where composite frit-wares with moulded bodies not much inferior to those of Kāshān were made, these did not apparently survive an earthquake of 540/1145 and the Ghuzz raids of 548/1153 which also devastated the potters' quarter at Marv.[18] Though Kāshān was not destroyed by the Mongols and continued in production throughout the 7th/13th century the depopulation of central Persia must have driven many local potteries immediately out of production; while changes in demand over several decades are obviously relevant to the marked fall of quality in Kāshān wares by the end of the century.

2. Shallow dish painted with fabulous bird in browish lustre over semi-opaque white glaze locally stained cobalt. 'Rayy' style. Iran, late 6th/12th century. Museum für Islamische Kunst, Dahlem I, 1592.



The trade routes from Persia to the West, however, bore much more traffic, initially, probably, from West to East. The principal 'Sāmarrā' wares are found at Susa, Rayy, Istakhr and many other Persian sites, both on the Gulf and in the hinterland, and in Arabia. The route by which they reached central Persia, particularly the medieval capitals of Sīrjān and Kirmān, remains conjectural. It seems probable that, at least up to the Mongol invasions, the route down the Gulf from Baṣra to Sīrāf and the other medieval ports was more practicable than the land routes of Persia[19] though the volume of pottery exports is very difficult to calculate. In the 6th/12th century, though the chronology is unclear, the Euphrates potteries probably introduced lustre to Persia. Fatimid Egyptian lustre-painted wares of the 'Sa'd' type over a frit body and a transparent alkaline glaze[20] have close parallels with lustre wares, evidently from Raqqa or a neighbouring Euphrates pottery, found at Tall Minis near Ma'arrat al-Nu'mān in north Syria. These inspired the design of the 'Rayy monumental' lustre wares (pl. 2) of the late 6th/12th century, though there is so

far no evidence that Rayy was the pottery. The earliest dated 'Rayy' piece is 574/1179; the 'Sa'd' group, and its Syrian analogues, was probably made between 493 and 513/1100 and 1120. The displacement of lustre potters eastwards was thus probably a gradual process, rather than the rush from Egypt following the downfall of the Fatimid Caliphate in 565/1170 postulated by Lane.[21]

Lustre wares once established in Persia became a speciality and until 656/1258, when the Euphrates potteries were destroyed by the Mongol Il-Khān, Hülegü, exports were almost entirely from East to West, as far as Fusṭāṭ, where numerous Kāshān lustre and *mīnāī* sherds have been found in the mounds,[22] together with Syrian or Egyptian underglaze imitations of them, while Raqqa wares testify to the supremacy of Kāshān. In the later 7th/13th century, however, there are signs that the direction of trade was once again reversed. Late 7th/13th-century lustre wares,[23] sometimes attributed to Sulṭānābād, are obviously Syrian in design and technique: the late 7th/13th-century revival of art and industry under the Īl-Khāns, particularly Ghazan (694–703/1295–1304), evidently attracted potters from the defunct potteries of the Euphrates. In the 8th/14th century the products of 'Sulṭānābād' are closely related to blue, black and white wares produced in Syria and Egypt, and some of the latter are so good that they could well have been used as models in Persia. However, the general southward displacement of the Syrian potteries from the Euphrates to Ḥamāh, Damascus and other sites after 646/1258 makes the eastern trade route difficult to trace.

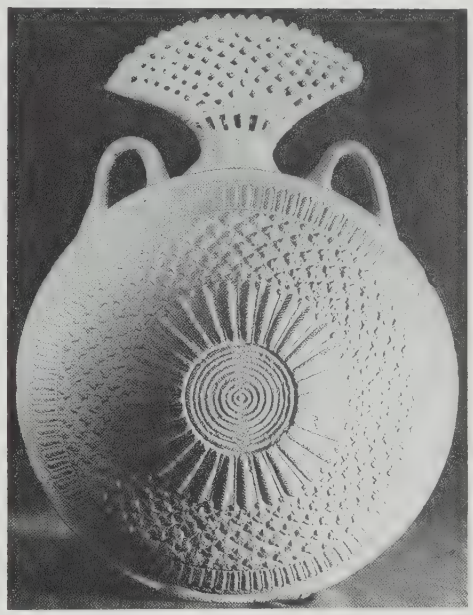


4. Gourd with flattened base and mouth in form of pierced fan. Sides bear relief-moulded ornament in concentric rings. Unglazed, buff ware. Iran, 7th/13th century. Private collection.

TECHNOLOGY AND MASS PRODUCTION

It is in pottery, perhaps, that the arts of Persia showed the greatest contrast with the arts of the Sasanian period. Though whole ranges of Sasanian pottery remain to be identified, the material so far known consists either of relatively coarse unglazed wares or heavily potted vessels with a dull copper-blue alkaline glaze. These wares continued to be made into the 2nd/8th century and their descendants, in the form of kitchen-wares and storage vessels, are still recognisable in the 6th/12th century. But little, if any, Sasanian pottery pretended to luxury. What Islam from the 3rd/9th century onwards provided, perhaps under the stimulus of imported Chinese wares, was therefore both technological innovation and the upgrading of pottery in Muslim eyes to the status of a refinement.

Pre-Islamic and early Islamic pottery from sites from Susa to Pjanjikent[24] is either unglazed or blue-glazed with only the crudest decoration. About 184/800 however, there was a sudden burst of energy from the potters of Mesopotamia. It has been conjectured that the catalyst was the appearance of Chinese pottery on the market, which, to judge from the Sīrāf material,[25] was not previously known, but it also owes something to the Mediterranean tradition. Roman *terra sigillata* had a final flowering in a fine carved jug painted with a red slip (*c.*184/800) from Susa (pl. 3), very different in inspiration from the carved or moulded unglazed wares which later became popular all over eastern Islam (pl. 4). The Mediterranean tradition appears in monochrome green- or yellow-glazed wares, some with flecks of golden decay suggesting lustre painting, lead-glazed over a hard relief-carved body,[26] found from Egypt to Afghanistan and probably made simultaneously in several centres and with decoration recalling repoussé metalwork. They first appear about 184/800[27] and, on the Apadana at Susa at least, persist for almost a century.[28]



5. Deep bowl with flaring sides painted in black and brown slips on white under a colourless glaze, Nīshāpūr or Afrāsiyāb 4th–5th/10–11th century. Freer Gallery, Washington D.C., 57.24.



Many of these early wares are experimental and few of them of high quality. It is striking how many of the known luxury wares were invented or chiefly exploited in Persia. Many badly damaged pieces found a ready market, and even the humblest wares may bear the marks of repair by riveting. The magnitude of the demand favoured mass-production techniques; however, the evidence of these for the period 184 to 803/800 to 1400 is decidedly sporadic. The manufacture of (late 5th–6th/11th–12th century) frit-wares was facilitated by the use of decorated moulds which were simultaneously coming into fashion for the decoration of unglazed wares – both because they guaranteed mechanical reproduction and because moulding, as with 10th–11th/16th–17th century 'Kirmān' wares, was the simplest way of handling the frit body. Yet if they reached a mass market production was very inconstant. Surface designs could also be reproduced by stencils, for example the shadowy gryphon at the centre of a 'silhouette ware' bowl cf pl. 6. Inspection of the standard repertory of figural *mīnāī* would also probably show mechanical reproduction[29] and the *cloisonné* technique would favour their use. However, such was craftsmen's facility in drawing that in other wares stencils might have been a disadvantage.[30] Many sharp designs, for example, the often repetitive inscriptions of Nīshāpūr-Afrāsiyāb wares (4th–6th/10th–12th centuries) are freehand work tidied up with a knife (pl. 5). Even Kāshān lustre wares, where stencils would have simplified the painting, appear to be invariably freehand, in contrast to the lustrewares of Fatimid Egypt many of which show the evident use of stencils. As for pos-

6. Shallow bowl with quatrefoil decoration and central medallion of stencilled gryphon under turquoise glaze. Iran, 545–97/1150–1200. Fitzwilliam Museum, Cambridge.





7. Dish painted with peacock in gold lustre over opaque white tin glaze. Iran or Mesopotamia, 4th/10th century. Museum für Islamische Kunst, Dahlem I, 12/62.

8. Bowl painted in cobalt in an opaque glaze with palmettes and a Kufic inscription, Baraka li-ṣā:ḥibiki. ʿamal:Aḥmad/Muḥammad (final *nisba* unread). Mesopotamia, 3rd/9th century. Said to be from Rayy. Museum für Völkerkunde, Munich, No. 28–8–82.



sible economies of scale from specialisation, the enquiries of Soviet archaeologists at Marv[31] and Afrāsiyāb[32] have elicited that, at least in firing, it was minimal and that glazed and unglazed wares and tiles were generally fired together, even allowing for the false impression of diversity which the batteries of unglazed potters' implements might give.[33]

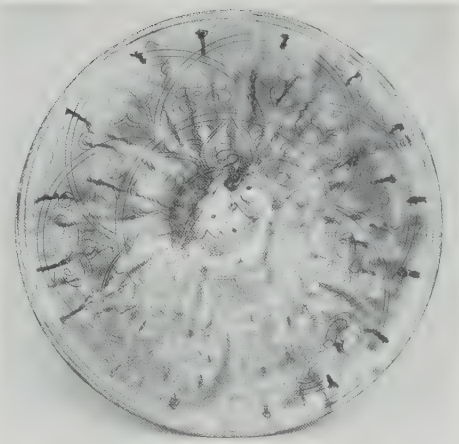
Lustre painting of the 3rd/9th century, on white or grey glazes, sometimes opacified with tin oxide and primarily associated with Sāmarrā in Iraq though known also from many Persian sites, shows no signs of mass-production. Initially the lustre is polychrome and often very dull in appearance, though a sherd in Washington[34] with bright golden lustre on a brilliant ruby ground shows what spectacular effects could occasionally be achieved. Though it is generally agreed that the development of lustre was a response to Muslim prejudice again gold and silver plate, neither shapes nor decorative repertory (in the 3rd/9th century almost entirely non-figural and without inscriptions) show the slightest indebtedness to metalwork. Polychrome lustre was difficult to control and though misfired pieces readily found a market, the high failure rate made it expensive. In the 4th–5th/10th–11th centuries polychrome lustre was abandoned for monochrome, usually olive-gold, and the decoration simplified to include heraldically posed animals, like a peacock in gold lustre (pl. 7), or grotesque human figures, all on a dotted ground. Such pieces were skilfully imitated at Nīshāpūr, where lustre was not made, in ochre slip under a transparent lead glaze.

The opaque grey or whitish tin glazes which provided the background for lustre painting often bore stained decoration in copper, cobalt or manganese of runny foliate or epigraphic designs and were sometimes stained bright yellow with bright green blotches (pl. 8). However, the scarcity of tin oxide also kept these wares expensive. Hence the adoption in Nīshāpūr, Afrāsiyāb/Samarqand and other localities in eastern Persia of transparent glazes stained green, brown and yellow over a white slip and sometimes over carved decoration in the body (pl. 9). This suggests the influence of China, but the topic is elusive since neither

Persian potters nor the Chinese committed themselves to blind imitation and it is by no means easy to decide how far the effects they produced were deliberate. The resemblance to Tang three-colour wares, which have recently been shown to have been in circulation in the Middle East[35] could, however, be misleading, or simply coincidental. Chinese shapes were on the other hand, indisputably much more influential, though Islamic bodies did not lend themselves to fine potting, and the subtlety of Chinese carved or moulded ornament was regularly sacrificed for more direct polychrome effects. Hence the appearance of polychrome-stained sgraffiato wares (from about 390/1000) with more prominent designs incised through the white slip. Many types are perfunctory, but there appeared more expert varieties, including so-called 'Gabrī' or Garrus wares (6th/12th century), found in quantity at Takht-i Sulaymān,[36] evidently manufactured in northern Persia, and champlevé, 'Aghkand' wares (probably *c.*590/1200 pl. 10) with foliate designs or animals clambering across scrolls often signed Abū Ṭālib, found in greatest quantities in the Caucasus and Transcaucasia.[37]

In Khurāsān slip-painted decoration, partially stabilised by the addition of frit, under a colourless lead glaze was of paramount importance. It was produced from about 390/1000 at many sites, from Gurgān to Marv, Samarqand and well into Farghāneh[38] with many degenerate local forms, and probably continued till about 590/1200.[39] The masterpieces of the genre mostly bear inscriptions, chosen less for their profundity than for the regular recurrence of their letter shafts to produce a roughly radial design – like '*Al-tadbīr qabl al-ʿamal yu'minak min al-naḍm*' (May precautions save you from regret!) (see pl. 5) and seem to have been specialities of Nīshāpūr and Afrāsiyāb between about 390–490/1000 and 1100. Among less austere products were dishes decorated with crude figural scenes (pl. 11) derived remotely from the decoration of Sasanian or 'post-Sasanian' silver but also incorporating astrological themes,[40] drawn rather crudely in manganese black with local green and yellow opaque staining. From these derived 5th–6th/11th–12th-century slip-painted wares, sometimes with primitively stylised birds or animals in polychrome slips, like those associated by dealers with Āmul (in Persia not on the Oxus) or Sārī and found in some quantity in recent excavations at Gurgān.[41]

The period 576–656/1180–1260 marks the supremacy of Kāshān and the predominance of luxury overglaze wares. These owed their development to the great technical innovation of the 6th/12th century, the frit- or silicon-enriched body. In its finest form, the 'Saljūq' white wares (made probably about 494–545/1100–50,[42] hence largely *post*-Saljūq, at Kāshān), ground up quartz was filled with a white clay giving a translucent body strong



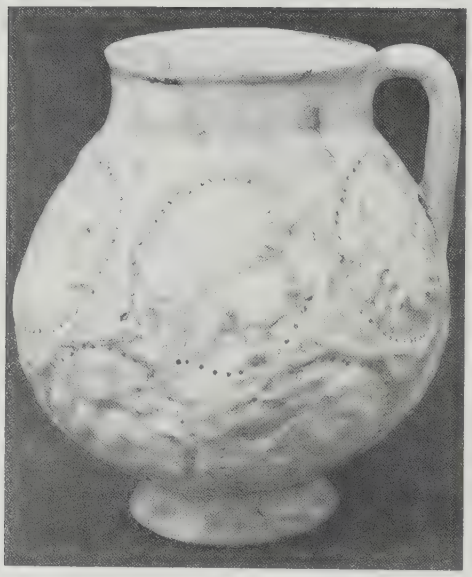
9. Shallow bowl incised with foliate panels under green glaze stained yellow and brown. Nīshāpūr, 4th–5th/10th–11th century. British Museum, London, 1956 5–18 1.



10. Deep Bowl with hare clambering across cruciform bud design. Colourless glaze stained green and yellow, confined by deep incisions. Northern Persia or Transcaucasia, 6th–7th/12th–13th century. British Museum, London. 1972 4–10 1.



11. Dish, painted with mounted warrior on ground of birds, stars and inscriptions. Slip-painted with local opaque staining in clear glaze. Nīshāpūr, 4th–5th/10th–11th century. Museum für Islamische Kunst, Dahlem I, 11/62.



12. Carved, moulded and pierced jug. 'Seljuk' white ware. Decoration of zodiac medallions bearing their planetary domiciles. Persia, 545–97/1150–1200. British Museum, London, 1966 6–13 1.

enough to allow both piercing and carving (pl. 12). These wares were not made for long, probably because of the difficulties of handling the silicon-enriched body. Monochrome wares, often with moulded decoration,[43] were also made at Nīshāpūr, Samarqand, Marv and other local centres, including perhaps Ānī and Ören-Kale.[44] Later modifications, painted in black under a turquoise glaze with inscriptions or foliate designs or, under a colourless glaze, with silhouette-like designs from star pictures – Hercules/Engonasin, Venus and Saturn[45] are probably from Kāshān (pl. 13).

OVERGLAZE WARES

The fashion for overglaze-enamelled wares (*mīnāī*) associated with Kāshān and some other central Persian sites in the late 6th/12th century may have its roots in attempts by Nīshāpūr and Afrāsiyāb potters to imitate imported lustre by decorating wares which had been already fired with an overglaze slip which was refired to give a white design. But its history at Kāshān is obscure. A series of bowls dated to the 570–80s/1180s (exceptionally, there are no dated *mīnāī* tiles of greater sophistication) shows the technique already at its height: no experimental pieces are known. The technique is complicated, involving successive refirings in a reducing kiln, but the Persian potter went further, composing designs of enamels and underglaze painting (*haft rangī*) and sometimes even added lustre as well.[47] Such was the accomplishment of the final product that initially it dominated Kāshān lustre production of the early 7th/13th century. The fussily varied textile patterns of the Freer lustre plate dated Jumādā II 607/December 1210 (pl. 14), must result from the need to interpret a polychrome *mīnāī* design in monochrome. Brilliant as they were, however, the designs were sometimes incongruous, like registers of episodes from the *Shāh-nāmeh* on a beaker in the Freer Gallery or the dish, in pl. 1, bearing a battle-scene from the campaigns of Jalāl al-Dīn Khwārazm-shāh in the 620s/late 1220s. In many respects the triumph of its genre, the dish (evidently *c.*628/1230) marks a crisis in Persian taste. By 648/1250 *mīnāī* wares, like a dish in pl. 15,



13. Bowl with flaring sides. Frit ware, decorated with central medallion in black slip of running figure (Hercules/Engonasin) under colourless glaze. Iran, 545–97/1150–1200. Nasli M. Heeramaneck collection. Los Angeles County Museum of Art, M. 73.5.259.



14. Flat dish painted in brownish lustre with sleeping groom and five beauties mounted on a dappled horse. Arabic inscription on rim includes craftsman's signature, ṣanʿat al-Sayyid Shams al-Dīn al-Ḥasanī, and date Jumādā II 607/December 1210. Freer Gallery of Art, Washington D.C., 41.11.

confine themselves to a reduced scale of enamels, generally on a turquoise ground, with foliate or abstract ornament in place of the earlier elaborate pictorial compositions. This perhaps explains Abu'l-Qāsim's report that by 701/1300 *haft rangī* was forgotten.[48] There are 'Sāveh' and 'Rayy' as well as Kāshān styles of *mīnāī* but the lack of correspondence between vessel-shapes and styles of painting has suggested to the Turkish scholar, Esin Atıl, that glazed frit-wares were fired at one centre (evidently Kāshān) to be enamelled elsewhere.[49] The combination of overglaze enamels and underglaze painting must have involved close co-operation between potters and painters, and even some preliminary agreement as to the effect to be achieved. Yet, if different centres were involved in the production of the final piece it is scarcely surprising that by the end of the 7th/13th century overglaze enamelled wares were restricted to *lājvardīna*, decorated with white, black and red enamels and with lavish gilding on a cobalt glaze.[50] This was made in Persia till the later 8th/14th century, as a bowl from Nīshāpūr at Dahlem dated Rajab 776/December 1374 testifies (pl. 16). *Lājvardīna* was particularly popular in the Lands of the Golden Horde and may even have been made there.[51] It was used for the cenotaph of Qutham Ibn ʿAbbās at Samarqand (715/1335); and it appears only slightly modified on the revetment of the Āqsarāy palace (decorated 770s/1390s) built by Tīmūr at Shahr-i Sabz.

Mīnāī was also, apparently, made outside Persia. *Mīnāī* tiles were made on the spot for the palace of the Saljūq Sultān, ʿAlā al-Dīn Kayqubād I at Kubādābād (*c.*633/1236) on Lake Beyşehir in south-west Anatolia; and *mīnāī* tiles and pottery of local production have also been found at the Golden Horde capitals of Saray Berke and Saray Baty on the Volga.[52] However, it was not made in Syria or Egypt. Early 7th/13th century polychrome underglaze painted wares from the Euphrates ('Ruṣāfa' wares) with designs imitating Kāshān *mīnāī*, and the poor-quality *mīnāī* sherds with enamels fired to the texture of sealing wax from Fusṭāṭ,[53] indicate that the demand was there. Curiously enough, no foreign imitations of *lājvardīna* are known, and the decline of *mīnāī* in Persia seems to be matched by a decline in exports.

The most influential factor in the development of *mīnāī* was enamelled glass, made on the Euphrates and then elsewhere in Syria and in Egypt from about 490/1100 onwards, and throughout its history *mīnāī* remained closely connected with it. Some great Mamlūk early 8th/14th-century glasses even show acquaintance with the figure tradition of *mīnāī* of some 100 years previously; but for the most part the influence was not reciprocal. Whereas Mamlūk glass was exported widely to the Yemen and thence to China or, via the Crimea and the Don basin, to Kiev, Smolensk, Novgorod and Novogrudok[54] and even reached northern Europe, the Persian *mīnāī* exported even to Khwārazm, northern Khurāsān, Bactriana and Transoxania was negligible. The most significant fact is that while *mīnāī* was not developed in Egypt or Syria enamelled glass remained almost unexploited in Persia: evidently enamelled pottery satisfied all the demand there was.

Like *mīnāī*, which appears in 575/1180 already fully developed, the magnificent lustre wares of the late 6th/12th century (575/1179 onwards) have scarcely any precedent. They also reflect striking changes in fashion. With the exception of a small olive-lustre hexagonal tile painted with a rabbit in the Shrine museum at Mashhad, which may well be the cut-down base of a dish and which seems to be from Fatimid Egypt, the earliest lustre group, traditionally associated with Rayy, features monumentally posed animals or monsters, like the fabulous bird (pl. 2) in monochrome chocolate-lustre, over semi-opaque white glazes, sometimes stained cobalt. Human figures occur but are very slackly drawn. This group shows clear indebtedness to the Tall Minis group of Syrian lustre ware and indirectly to the later lustre wares (494–545/1100–50) of Fatimid Egypt. By the late 6th/12th century pieces decorated in miniature style appear, with huntsmen or seated drinkers, or with minute foliate designs, as on a flask from Bujnurd at Dahlem (I. 46/70) dated 595/1198–9. Wares of both groups occurred at Ören Kale/Baylaqān in Soviet Āzarbāījān and at Ānī, Dvīn/Dābil and Ganjeh. Though the suggestion that some of them were actually made at Ānī[55] has not been corroborated 'Rayy' lustre sherds tend to occur more widely in excavations than the better documented 7th/13th-century Kāshān lustre pieces and were obviously a much cheaper type. It is not now generally accepted that they, or any other lustre types, were made at Gurgān. A few lustre pieces may have been fired experimentally at remote sites,[56] and perhaps even at Marv; however, there is still no satisfactory alternative to Kāshān as the centre of the lustre industry.

Its most spectacular products often bear attributions to Kāshān as well as craftsmen's signatures and dates (mostly early 6th/13th century) and were obviously highly fashionable. The American scholar Richard Ettinghausen,[57] has observed that the mould used for the lustre dish in pl. 14 dated Jumādā II 607/December 1210 with a scene of a sleeping groom and a vision of five beauties riding a dappled horse, was used for other extant lustre dishes and that these may have constituted a service perhaps ordered by a local dynasty, like the



15. Shallow dish, cavetto with painted flutes and centre with relief carved fish surrounded by *naskhī* votive inscription under opaque turquoise glaze. Detail in overglaze red and black enamels and gilt. Iran, about 648/1250. Musée du Louvre, Paris, MAO 6540.

16. Rounded bowl, painted in red and white enamels and gold over cobalt glaze. Dated at centre Rajab 776/December 1374. From Nīshāpūr, Museum für Islamische Kunst, Dahlem I, 24/66.

18. (*facing page*) Footed bowl with steeply flaring sides painted in black and cobalt under colourless glaze with stylised foliate ornament and radial stripes of scribbled verse. Kāshān, 597–618/1200–21. Freer Gallery of Art, Washington D.C., 65.28.



17. Tall jar with relief friezes of riders, birds and animals painted in chocolate lustre over white, semi-opaque glaze. Ex-Vassilevsky collection. Kāshān, late 7th/13th century. State Hermitage, Leningrad.



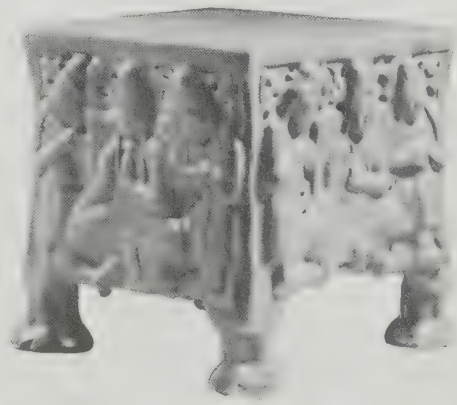
Atābaks of Tabrīz or Āzārbāījān. The vision scene, like the design of a lustre dish in the Boston Museum of Fine Arts painted with the planets and the signs of the Zodiac, is, however, not well adapted to pottery. Moreover, the dates and signatures these pieces bear are more appropriate to tiles, where signatures and dates would commemorate the donation with which they were associated. They should, therefore, perhaps be considered as by-products of the tile industry, particularly the dated monumental *mihrābs* and friezes, which make it possible to document change in the style of lustre painting through the 7th/13th century. By 658/1260, for example, the decoration of lustre pottery has become much simpler and even employs coarse relief carving, like the incongruously decorated Vassilevsky jar (pl. 17) (658–668/1260–70) with its resemblance to a cylindrical tile. The early 8th/14th century shows a technical decline: the chinoiserie motifs introduced are far from skilful and the scribbled inscription borders have become gibberish.

The Kāshān lustre pictorial wares of the period 590–610/1200–20 were simultaneously imitated more cheaply and simply in black-painted pottery under turquoise glazes or almost colourless glazes selectively stained cobalt. Thus, a bowl with entwined dragons painted with a central medallion of a deer grazing by a fish pond[58] is an almost exact copy of a lustre painted bowl in the Metropolitan Museum of Art, New York dated 607/1210. But Kāshān black and blue wares, in particular, their speciality, flaring-sided bowls on high foot-rings, also show abstract foliate decoration, including elegant sprays of aquatic weeds. Some of them are also stained with cobalt, which the Kāshān potters controlled sufficiently to produce sharply striped blue and white wares. Their clear drawing and brilliant glazes make these early 7th/13th-century underglaze-painted Kāshān wares one of the triumphs of the Persian potter (pl. 18).

Despite the supremacy of pre-Mongol Kāshān even less is known of its history after 700/1300 than before 566/1170. Apart from a handful of lustre tiles dating over a period of more than two centuries[59] virtually nothing after 720/1320 can be confidently identified as a

Kāshān product. Monochrome wares, often with relief decoration and with a characteristic opaque glaze, thick and soapy in appearance and with a high boron content, had become popular about 658/1260. Pl. 19 shows a four-legged 'stool' (probably a stand for glasses or water-pots) fashioned in such a way, with reliefs of enthroned rulers and their attendants, as are some models of houses, which may have been offerings to the Buddhist shrines frequented by the Īl-Khāns before their conversion to Islam in 694/1295.[60] Their quality is not superlative. The soapy glaze blurs the carving and makes underglaze decoration impossible: indeed, with the possible exception of a fine black and turquoise albarello in the Keir collection, with registers of foliate decoration (which has been attributed by some scholars to Persia in the 9th/15th century), 700/1300 spells the end of the fine Kāshān underglaze-painted wares. But none of the monochromes appears to be post-700/1300 either.

19. Four-legged rectangular 'tabouret' with reliefs of enthroned rulers with attendants, under opaque, soapy turquoise glaze. Iran, late 7th/13th century. Mahboubian collection. No. 294



THE MONGOL INVASIONS AND THE 'INTERIM' 8TH/14TH-CENTURY PERIOD

It must be significant that the ascendancy of the late 6th–7th/12th–13th-century Kāshān luxury wares shows virtually no Chinese influence. Monochrome wares, particularly celadons, remotely inspired by Chinese prototypes, continued to be important, but the full



20. Stem-bowl painted in underglaze blackish-green, cobalt and manganese purple with a pair of blurred birds in foliage. 'Sulṭānābād' or Kāshān, dated 674/1275–6. British Museum, London.

impact of chinoiserie was felt only towards the end of the 7th/13th century. The Mongol Īl-Khāns shared the rather outré taste of their Yuan relatives in China, and the first known Mongol palace, constructed by Abaqa Khān at Takht-i Sulaymān (dated by lustre tiles of the years 671–5/1272–7) has a chinoiserie repertory of decorative motifs – lotus, dragon, paeony-leaf, phoenix, etc.,[61] copied, it has generally been concluded, from silks or embroideries and employed almost certainly on royal orders. However, the characteristic Longquan celadons with 'floating relief' or resist decoration in biscuit contrasting with the celadon glaze[62] popular in 8th/14th-century Yuan China, seem to have been known to the potters, some of whose glazed tiles employ unglazed relief decoration on a contrasting glazed ground. So far no Longquan celadons, or Persian imitations of them, have come to light.

The disappearance of Kāshān about 700/1300 inaugurates an 'interim period' in which Persian pottery shows a pronounced lack of direction; and it is no better charted now than when Reitlinger surveyed it in 1938.[63] Nothing demonstrates this so well as the history of unglazed wares from the 4th/10th to the 8th/14th century. High quality stamped or moulded unglazed wares were ubiquitous from the Euphrates to the Oxus and vary surprisingly little over vast areas, evidently because it was the stamps or moulds for their decoration which were widely exported, though the bodies, sometimes with a striking greenish-buff wash, are all fairly similar. The most impressive finds have been from the potters' quarter in Marv,[64] with moulds and plaques decorated with a rich repertory of grotesque humans, animals and inscriptions. Stamps for the manufacture of moulds and other potters' implements have also been found there and even a few bronze-moulds (evidently a special order). Many are signed by a craftsman, Muḥammad ʿAlī ʿInāyatān, who is thought to have worked at Marv but whose name also appears on a sherd from Novaya Nisa.[65] The earliest wares bearing this signature appear to be early 6th/12th century, but there are signs that earlier moulds were later re-used, perhaps when the potters' quarter was recolonised after its devastation by the Ghuzz in 547/1153. Whether or not Marv was the centre of the industry, the abundance of comparable material from other Soviet excavations and sporadic finds in Iran, like a gourd with a moulded foot and a filter-mouth in the form of a fish's tail, show that Marv was far from exceptional (see pl. 4).

There are considerable differences in the decoration of different unglazed wares – waterpots, crocks (*ḥabbs*), spheroconic vessels etc., but within each group the overall resemblances are marked. *Ḥabbs* from recent excavations at Bālis/Eski Meskene on the Euphrates and known from other Mesopotamian sites are strikingly similar to a certain crock datable to *c.*550/1156 from Maiwand in Afghanistan recently presented to the British Museum. It is also possible that some moulds or stamps made for the decoration of unglazed wares were used for the monochrome moulded frit-wares made at Nīshāpūr and other sites, though the frit-body took the mould less well and the glaze tended to blur the contours.[66]

The Mongol invasions of 617–18/1220–1 are followed everywhere by a decline in the quality of unglazed moulded wares: sherd material from Varāmīn shows coarser moulds and primitively scratched decoration. But by 790/1400, or perhaps earlier because no dated pieces are known, they do not appear to have been made at all. It is exceedingly curious, for unglazed vessels have remained essential in Persia up to the present day. But most curious is the absence in the 8th–9th/14th–15th centuries of the highly fired, often well decorated

'grenades', found at sites from Egypt to Central Asia and mostly locally made, which have been identified in most cases as fire-blowers or aeolipiles,[67] essentially kiln utensils for the production of highly fired glazed wares. They could only have been made obsolete by developments in kiln-construction, but, despite the pioneering work of Soviet archaeologists, nothing of the kind has been identified. The absence of aeolipiles is clearly relevant to the decline of the Persian pottery industry in the 8th–9th/14th–15th centuries. However, it remains so far inexplicable that their manufacture should have been abandoned.

The centre of gravity of Persian pottery after 700/1300 is often associated with Sulṭānābād, but 'Sulṭānābād' wares are heterogeneous and there is no general agreement as to what, if anything, was made there. One characteristic product owes its origin to a Raqqa fashion (pre-656/1258) for black underglaze painting contrasting with cloudy cobalt-stained decoration in the glaze, as found on the stem-bowl in pl. 20, dated 674/1275–6. The taste persisted, but whereas the sharp underglaze painting became more careless, the cobalt staining gained nothing in clarity. There was also a return to heavy white slip decoration, generally under a greyish glaze stained with cobalt or turquoise, like the dish in pl. 21 with a panting hart on a ground of chinoiserie paeony leaves (*c.*720/1320). Despite a limited range of shapes and poor potting the effect was much admired in 8th/14th-century Egypt and Syria where some superior versions of 'Sulṭānābād' were produced.

Simultaneously there arose a profusion of local potteries, all influenced by these slip-painted wares. With pottery associated with Bujnurd, Juvayn and Isfārayīn, the heavy slip gave way to stylised painting of chinoiserie motifs which seems more reminiscent of the 7th/13th-century Kāshān tradition. Imitations were also made further afield. The most interesting of these are from two capitals of the Golden Horde, Saray Berke and Saray Baty in the Volga basin, where kiln material has been brought to light. A typical specimen is a bowl with a peacock-goose showing the marked stylisation of the 'Sulṭānābād' repertory of chinoiserie motifs (pl. 22). It has been recorded from most Golden Horde sites, from Akkerman/Belgorod on the Dnepr in the west to Khwārazm, as far as the Oxus, the eastern frontier of the Lands of the Golden Horde; while a piece in the Reitlinger collection now in the Ashmolean Museum, Oxford bears a dealer's attribution to Sīstān, its southern frontier. This vast area, however, makes it highly improbable that the Volga kilns were the only source of 'Golden Horde' wares, and material from sites in Khwārazm, including Shamakha Kale, Zamakhshār, Yārbekir and Urganj,[68] shows marked local differences in decoration. Its chronology is entirely conjectural. The Golden Horde was at its zenith in the reign of Uzbek/Özbek Khan (712–30/1312–30), but it continued to be important up to the defeat of Toqtamish by Tīmūr in 791/1395. Little other Golden Horde pottery has been identified[69] and the probability is that these sub-Sulṭānābād wares continued into the 9th/15th century with little change.



21. Footed bowl with flattened vertical rim decorated with panting hart reserved on grey slip ground and enhanced with cobalt splashes under colourless glaze. Sulṭānābād, late 7th/13th century. Freer Gallery of Art, Washington D.C., No. 47.9.

THE INFLUENCE OF CHINESE PORCELAIN

By 790/1400 the influence of Chinese blue-and-white porcelain was paramount in Central Asia and Persia. By the mid-8th/14th century it had come to combine characteristically Islamic-ordered decoration with the white body and clear drawing for which the Persian potters had striven for centuries. It has been plausibly suggested that in this the Chinese, at least initially, were catering for an export market.[70] If so Yuan blue-and-white precipitated the technical decline of Persian pottery of the 'Sulṭānābād' group in the period following 750/1315. Documentary evidence for the arrival of Yuan blue-and-white porcelains into Persia is lacking, but the many imitations, mostly inept, from Tabrīz to Samarqand on sites datable to the late 8th/14th century suggest that their production was a major preoccupation. The ineptness is not surprising. Imitation posed insuperable problems to the potters with their inadequate materials and kiln technique; hence the length of the period, almost two centuries, with barely a single landmark, when potters, struggling ineffectually to prevent the cobalt blue from running, produced blue and white or blue, black and white wares.

It is, unfortunately, delusory to suppose that some sort of chronology for the period 750–957/1350–1550 could be constructed by reference to Chinese porcelains of the period. The bold decoration of Yuan blue-and-white long remained fashionable and was continually re-imitated, and it is far from clear that Persian potters initially wished to imitate specific pieces. The earliest datable Persian blue-and-white seems to be tiles, for example a tile with a central lotus panel and *naskhī*-inscription border in cobalt on white from Saray Berke, comparable perhaps to tiles erected by Ulugh Beg in his Chīnī-Khāneh at Samarqand (pre-800/1410).[71] Slightly later, perhaps made under the patronage of Shāh Rukh at Herat, is a flat-rimmed dish with a nightingale in foliage painted in cobalt with black contours under an iridised glaze.[72]

22. Shallow rounded bowl painted in black with a peacock-goose on dotted ground under colourless glaze partly stained dull cobalt and turquoise. From Saray Berke/Novy Saray. Golden Horde, 699–751/1300–50. State Hermitage, Leningrad.





23. Base of large dish painted in two tones of blackish cobalt on white with the twelve signs of the zodiac and some of the planets. Signed ʿAbd al-Waḥīd and dated 971/1563–4. North Persia. Islamisches Museum, East Berlin, I. 1292.

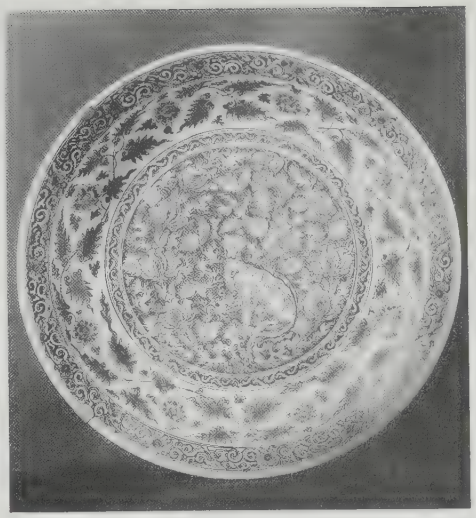
From the mid-10th/16th century onwards, however, progress was rapid. One of the earliest dated successes is the base of a large dish painted in two tones of blackish-blue with a zodiac band, dated 971/1563–4 (pl. 23). However, there is no general agreement on where it was made, although Central Asia never produced pottery of such competence and a group of comparable pieces from Kubachi in Daghestan, where the inhabitants have been renowned as collectors for centuries,[73] suggests that they were from north Persia. The zodiac medallions are on a scale ground, perhaps chinoiserie in origin, but the drawing is utterly Persian, down to the figure of Capricorn as an acrobatic Persian goat, like those admired in 837/1433 at Hurmūz by the Chinese navigator, Ma Huan.[73] Of equal clarity in design is a dish (*c.*890–940/1500–50) painted in black under a bright green glaze with a pair of fishes (evidently the sign, Pisces), clearly invoking Persian carved jades (pl. 25). However, there are other dishes (probably *c.*1009/1600) obtained at Kubachi which are from another source. They are painted in black, blue and green with details in red and yellow slips, and their repertory is from Safavid tile-work, willowy foliage and fat, epicene figures under a disfiguringly crackled glaze. They show little chinoiserie decoration, though one dish with a pair of peacocks in runny cobalt under an iridised glaze (in the Musée des Arts Décoratifs in Paris, and attributed by Reitlinger to the 9th/15th century) is technically similar. Given their accepted date, 947–1017/1550–1620, the rarity of motifs from the repertory of Ottoman Iznik is most striking. Exceptionally, two pieces, one with a stylised peacock in foliage vaguely recalling a Yuan prototype,[75] employ polychrome colour schemes suggesting that ultimately Iznik may have been their inspiration. Both these pieces have been ascribed to Iṣfahān, whither Shāh ʿAbbās I moved the court in 1006/1598, though there is no certainty that any potters moved with it. In any case, according to Arthur Lane, no 'Kubachi' wares of any type were made after 1039/1630.

By the late 10th/16th century pottery associated with Kirmān and Mashhad appears. The body is a respectable soft paste, suitable for the manufacture of large pieces, and its decoration is a more than respectable imitation of the Chinese. The sudden rise in quality may be the product of the slow improvement of Persian imitations of Chinese blue-and-white from 800/1400 onwards. However, the slowness of the progress reflects upon the rigidity of the Persian pottery industry, and the change may well, therefore, be the result of external influence, perhaps court control of the arts like that undertaken by Shāh ʿAbbās I at Iṣfahān

when he made it his capital. Court control of the Ottoman potteries of Iznik, it has been maintained, had been necessary to guarantee the uniquely high quality of its products between 910 and 990/1520 and 1600.

Unfortunately, the Kirmān and Mashhad potteries are far from conclusively documented, and 'Mashhad' may simply be a superior sub-group of 'Kirmān'. The earliest dated Kirmān piece is a broken pilgrim flask in the Victoria and Albert museum with a breathless nightingale in foliage, dated 930/1525. The earliest Chinese models imitated appear to be porcelains of archaizing type made in the Wanli period (981–1028/1573–1619), but thereafter Persian potters followed Chinese taste: 11th/17th-century Kirmān and Mashhad pieces, mostly marked with a blue tassel instead of the standard Chinese five- or six-character mark, follow Ming Transitional wares in design. Landscape and figure drawing is in general rather stylised; but some of the animal drawing, for example, a flaming tiger seated by a rock (Mashhad group), shows a highly original vivacity (pl. 24). The Mashhad group with its finer, harder body, comprises only a small minority of the known pieces and was probably made from the late 10th/16th century to about 1060/1650. Kirmān blue-and-white, as dated pieces attest, continued into the 12th/18th century, but with a marked decline in taste and technique.

Other Kirmān wares were enhanced with tomato-red and dull green slips. These designs often diverge considerably from Chinese models, incorporating sprays of wispy pinks (Dianthus deltoides) or crudely drawn figural scenes, particularly Khusrau encountering Shīrīn bathing. Very similar floral motifs occur on monochrome Kirmān wares, in white slip over an olive pseudo-celadon or a light cobalt buffer coat.[76] This may also be incised to show an underlying white slip with designs inspired by Persian or Ottoman Turkish encrusted jades. Though this group is very probably 11th/17th century there are no dated examples, and the rather subdued colour schemes are paralleled by some strange late 10th/16th-century Iznik wares which have white slip-painting of carnations and other flowers on



24. Large dish, body 'soft paste', painted in black and cobalt with flaming tiger seated on rock in lavish chinoiserie peony foliage. Iran, *c.*1009/1600. ('Mashhad' ware). Museum für Kunsthandwerk, Frankfurt-am-Main, No. V 1.



25. Flat-rimmed dish painted with the constellation Pisces in black with a Persian verse inscription surround under a bright green glaze. Northern Iran 906–57/1500–50. Victoria and Albert Museum, London.

26. Piece-moulded ewer with openwork medallions. 'Soft paste'. Glazed opaque lavender, green, yellow and turquoise. Iran, 1009–60/1600–50. Hetjens Museum, Düsseldorf, No. 12635.



displeasing creamy tomato-coloured or slate-blue grounds. They are so different from the general production of 10th/16th-century Iznik that they may well be interpretations of Kirmān pieces which came the way of Constantinople; the originals could then be dated to the period 960-1010/1550-1600.

An unidentified pottery, perhaps Yazd, has been associated with the later, poorer Kirmān wares of the 12th/18th century. But even the source of the really fine wares is obscure. These range from stone-wares, including the majority of the Persian celadons (early 11th/17th century) ordered for the Topkapi Saray to supplement the palace services of Chinese celadons or replace breakages, to almost perfectly vitrified bodies,[77] with pierced and sometimes elaborately carved or moulded decoration. These are evidently an inspired reminiscence of the 'Saljūq' white wares and were so successful that they withstood the competition from the rise of European porcelains or soft pastes in the early 12th/18th century and were still, evidently, imported into Europe in 1171/1758. Of more local repute, and of even more obvious virtuosity, were piece-moulded ewers, (pl. 26), bottles and flasks now associated, *faute de mieux*, with the court of early 11th/17th century Iṣfahān. Their glazes are brilliant and spectacular – lavender, green, yellow and turquoise – and it is difficult to believe that they were not immediately inspired by Ming *cloisonné* porcelains. However, their daring use of pierced medallions of contrasting colours for the walls also suggests considerable indebtedness to the techniques of the 6th–7th/12th–13th-century Persian potters, particularly in the field of unglazed earthenware, while the brilliance of their glazes owes much to the opaque monochrome wares of the later 7th/13th century.

The fruitful results of Safavid revivalism may be seen as a beneficial effect of the wholesale imitation of Chinese porcelains. Though revivalism of any sort is extremely rare in the arts and crafts of Islam, the achievements of the 11th/17th-century Persian potters are probably the best pots ever made in Persia. However, they were then faced with their ultimate temptation; to compete on the export market. In Europe they circulated as genuine Chinese blue-and-white. The fraud, if initially venial, was pernicious and not merely the fault of dishonest foreign traders: by 1071/1660 the majority of Persian potters were geared to the cheap reproduction of Chinese blue-and-white.

THE DEMISE OF THE PERSIAN POTTERY INDUSTRY

Kirmān wares, Raphael du Mans claimed in 1071/1660, with some justification, were indistinguishable from the Chinese porcelains. It is difficult to determine though what proportion of Persian blue-and-white reached Europe since so much of it must have masqueraded as Far Eastern and since, apparently, the term 'Persian flask' in the Dutch East Company records refers to a shape not a provenance. However, it was from the Far East that catastrophe struck.

The inevitable confusion between Persian and Far Eastern blue-and-white makes it difficult to deal with the crisis in terms of exports. However, the figures for imports into Persia tell their own story.[78] Between 1060 and 1090/1653 and 1682, a maximum of about 5000 Persian pieces found their way eastwards in Dutch holds, first to Batavia and ultimately to Japan, most probably as cheap specimens for copying. But in 1068/1659 the Dutch ordered a vast amount of Japanese porcelains for Mocha, a major entrepôt for Ottoman trade with the eastern Mediterranean; and in 1073/1662 they ordered 22,220 Japanese vessels, mostly blue and white, for the Dutch residency at Gombroon/Bandar 'Abbās on the Persian Gulf. There were considerable delays in production and, doubtless, no order was ever fully executed; but the quantities show that the orders were a matter of deliberate policy and that despite the relative expensiveness of Japanese porcelains. In the following the years the Indian and Arabian factories were ordering an average of 40,000 pieces per annum, not only teacups, which in the Near East were used for coffee, but large pieces as well. Records for Mocha and Gombroon in the 1050s/1640s show that even greater quantities of Chinese porcelain (irrespective of breakages) were sold there. Chinese exports in the period 1071–91/1660–80 show some decline, possibly counterbalanced by a decrease in breakages resulting from improved packing. However, any decrease was well compensated for by the increase in Japanese exports.

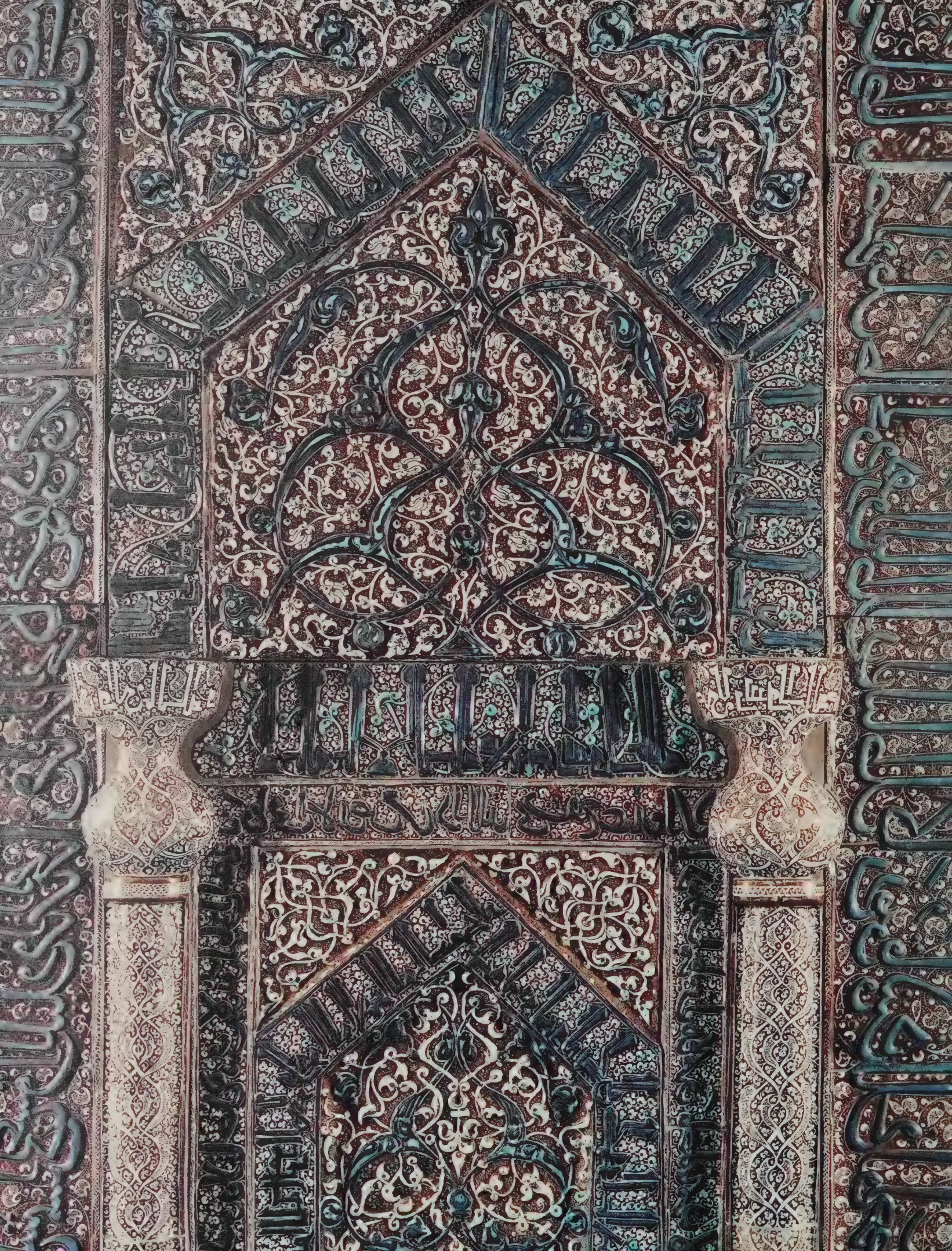
Japanese porcelain, the Dutch scholar Volker remarks, did not initially find a ready sale in Europe and suffered fairly seriously from the reorganisation of the imperial kilns of Jindezhen in 1683.[79] But it was far superior to anything the Persian potters could then produce. Annual imports of between 40,000 and 120,000 combined Chinese and Japanese pieces were obviously sufficient to account for total Persian demand and deprive the 'Kirmān' imitations of their market. There was no choice: with their virtual monopoly of maritime trade the Dutch could impose precisely what they wanted on Persia.

The story, however, is not murder but suicide. The 11th/17th-century Persian potters, for all their expertise, were fatally unadaptable and were therefore totally at the mercy of the evolution of taste for Chinese porcelains. The steadily increasing production of Japanese porcelains from 1061/1650, the reorganisation of the imperial Chinese kilns at Jindezhen and the expansion of European blue-and-white factories like Delft deprived the Persian potters of their market and left them with no alternatives to offer. But for a brief 13th/19th-century revival under European stimulus by 1112/1700 the industry had effectively suffered from a surfeit of the Chinese influence which for so many centuries had fired the imagination of the Persian potter.

This demise could not, of course, lead to the total extinction of the industry. There is a reference in Justi's *Vollständige Abhandlung von den Manufakturen und Fabriken*[80], which suggests that some Persian soft paste wares (perhaps the 'Gombroon' soft pastes) were imported into Europe as late as the mid-12th/18th century. However, this was virtually the last gasp. The late 11th/17th-century revival of lustre[81] was ultimately of as little account as it is poorly documented. The body is harder and whiter than most of the Kirmān group, but the glaze is greenish and rather uneven, and the pieces were fired on cockspurs, which had spelt the decline of Kirmān blue-and-white. The lustre painting, often also on brilliant cobalt glazes, is generally coppery and sometimes has a bright violet sheen. The impulse for their production was also probably revivalism; but their ornament – irises, carnations or, very exceptionally, Iznik-like foliage – and the mediocre quality of the final product suggest that the predominant influence was the stylised and rather limited repertory of 11th/17th-century lustre wares from Valencia. Nor do the forms, small bottles, dishes, bowls and hookah bases, show much technical expertise. To judge from the single dated piece known (1064/1654 or 1084/1673 – the date is not clear) these lustre wares were made in the later 11th and 12th/17th and 18th centuries: Yazd, Kāshān and Shīrāz have been proposed as centres, but nothing definite is known. The latest dated piece, a small violet lustre bowl, is signed Muḥammad Yūsufī and dated 1212/1797.[82]

This chronicle of so much fog ends in further confusion. Some 12th–13th/18th–19th-century pottery was apparently made at Nā'īn. It is derivative, bazaar art, mostly pathetic imitations of Canton *famille rose* or Mason's Ironstone China. The revival of the arts, under the Qājārs in the 13th/19th century with its strong Sasanian flavour, seems to have passed pottery by. Relief tiles with traditional figural subjects under a polychrome stained glaze had a certain vogue, but, apart from a few pieces made for the Great Exhibition in London of 1851 which attempt to incorporate Qājār motifs, the tiles failed to influence the small quantity of even tolerable pottery produced. Evidently, by the Qājār period, if not earlier, tile-makers and potters worked separately from one another and though this does not seem rational it has so far remained uncontested. The only 13th/19th-century pottery worth a second look is a series of flat dishes with rather crude radial or cruciform designs reminiscent of 8th/14th-century Syrian wares in manganese-black and green with cobalt or turquoise staining and they are associated with Bukhārā. They are now thought to have been made at Khīva[83] where comparable 'folk' wares are still made; but they may have been made at Bukhārā as well.

It is paradoxical that the pottery industry, economically the most important Persian industry from the 3rd/9th century to the 13th/19th, should have left so little evidence of its evolution, expansion and decline. Nevertheless certain general surprising characteristics emerge. It is in Persia that pottery showed the greatest extremes of taste and experiment – the sobriety of 'Saljūq' white wares, the finesse of early 7th/13th-century Kāshān lustre and underglaze-painted wares, and the minute detail of *mīnāī*. By the 11th/17th century, if not earlier, the Persian potters' technical control of bodies and glazes was unparalleled. With this expertise came a spectacular period of revivalism (it is easy to see why *mīnāī* was not part of this, for it owes its decorative value to surface decoration which has little to do with the pot which bears it). The fatal error was to attempt to compete with the Chinese on the export market. No earlier Persian potters attempted this, and the Chinese, for their part, had a long history of adept improvements on foreign competition. Their retorts, and the development of Japanese and European manufactures, left the Persian potters imaginatively, as well as economically, bankrupt, which deprived them of the ability to sell even in the home market. This latter was flooded by finer, often cheaper, imported wares. The danger of revivalism is that it distracts attention from innovation. The early 12th/18th century marks the end of Persian innovation in the pottery industry, which by 1163/1750 was virtually dead.



18 TILEWORK

INTRODUCTION

ADJOINING THE BAZAAR and fronting the palace a superb mosque is erecting; the front is covered with enamelled bricks in the form of mosaic. It is complete to the first storey and the principal arch which is formed of hewn stone has a solid and handsome appearance.[1] So George Keppel described the Masjid-i Shāh of Zanjān, completed in 1242/1826–7, which in its tilework continued a tradition of architectural decoration which had become pre-eminent in Persia. It would seem logical that as there was a great demand for tilework it would require the support of a considerable industry. Yet in comparison with the contemporary tile and ceramic industry of Europe, for example at Spode and Minton, whose progress can be followed through detailed archives and pattern books, information about that of 13th/19th century Persia is at present distressingly elusive; this situation deteriorates even further for the earlier periods of tile production. It does seem, however, from deductions concerning late 13th/19th-century conditions and from evidence provided by recent tile workshops, that there was never a large-scale industry. Workshops are modest with a few craftsmen and apprentices, and are operated on a family basis, suggesting that they are continuing a well-established tradition of small units using locally available materials.[2]

Despite the lack of background documentation, much information can of course be gained from the tiles themselves which adorn buildings throughout Persia and neighbouring areas once within its sphere of influence. The chronological record is impressive, ranging, although sporadically, from Elamite times *c.*1250 BC through the polychrome glazed bricks of Achaemenian palaces to the present day. The vitality and variation in style – from the tentative experiments of the 5th/11th century in enlivening a matt brick surface with turquoise glaze to the glittering panoramas of Safavid and Qājār buildings is always apparent. The traditions of technique and design survive today, as tiles are made both to restore old and to embellish new buildings; frequently large panels of animals and trees decorate a modern hotel,[3] or friezes of scrolling foliage run along the top of a courtyard wall, testifying a persistent liking for tilework decoration.

Practical and aesthetic reasons explain the importance and continuity of tilework as architectural ornament. The basic construction material of Persia is the relatively cheap and abundant brick, ranging from the sun-dried mud and straw-chaff mixture used in village architecture to the more technically sophisticated kiln-fired clay used in large-scale urban buildings. A stronger and more weather-resistant surface was achieved by covering the brick with an impermeable layer such as that provided by glazed tile. Other practical considerations are environmental, since glazed surfaces create coolness and can easily be kept clean in a hot and dusty climate. Once practicalities were solved there was room for aesthetics and thus there was no reason why the glazed surface should not have been made visually attractive by a combination of colour and design.

In general the impact of tilework depends on three conditions which were admirably fulfilled in Persia: the appropriate position in an architectural scheme; the total massed effect; and the quality of each individual tile. Tilework was used to emphasise rather than to conceal structure by being used in a pattern suitable to the shape of the surface to be decorated, or by taking architectural units and using them as design components. The curved volume of a dome interior is, for example, stressed by a carefully graduated pattern which draws the eye upwards. In the 11th/17th-century Masjid-i Shaykh Luṭfallāh in Iṣfahān, this effect is achieved by drop-shaped motifs which ascend radially to the apex of the dome.

Tilework decorating the facade of an arcaded courtyard effectively organises and unites the rectangles and triangles of vertical and spandrel into a coherent design. The most striking effect of massed tilework is of brilliant and intense colour. A delight in colour was

Detail of *miḥrāb* from Masjid-i Maydān, pl. 9.

deeply rooted in Persian culture. The Achaemenian site of Persepolis, today a sober grey limestone ruin, once overflowed with colour where the figures in reliefs wore gaily painted robes and were adorned with appliqués of gold jewellery. The harsh greys and browns of most of Persia's landscape parched in a bright sun further encouraged the desire for the contrast of bold and definite colour. On closer inspection, tilework surfaces resolve themselves into individual units composed of intricate motifs consistently relishing the use of supplementary colour and lively detail. This stress on textured surface detail is an essential component of Persian aesthetics shared by all media.

The study of Persian tilework, however, abounds with problems, many of which are shared with its close relative, ceramics (see chapter 17). In both cases crucial information about provenance has often been lost as so many ceramics have been obtained from uncontrolled commercial digging and tiles have been removed from their original monuments. Few Islamic sites have yet been excavated in Persia and these, apart from Takht-i Sulaymān and Sīrāf, have yielded neither kilns nor workshops. The only written sources are some references in Arabic and Persian and later accounts written by European visitors in their official reports and travel diaries. As yet only two technical treatises are known: that of Abu'l-Qāsim of Kāshān written in 700/1301[4] and that of ʿAlī Muḥammad Iṣfahānī written in 1305/1888.[5] The analogy between ceramics and tilework should not, however, be pursued too far as they served different purposes which required individual solutions; many tiles have a body material closely related to brick and while techniques such as mosaic and *cuerda seca* are exclusive to tilework, monochrome glazing, underglaze, and lustre painting are adaptable to both ceramics and tile. Apart from examples in museums and private collections a large proportion of tilework is fortunately still *in situ*; where buildings can be dated, in whole or in part, by inscription etc., it is possible to attempt some chronological sequence of the development of tilework.

MATERIALS AND TECHNIQUES

Since the evolution of tilework is so closely dependent on the technical possibilities of clay and glazes it is essential to give some account of them, although this must be regarded as comment for guidance rather than fact as insufficient samples have been scientifically analysed. One of the earliest forms of tilework in Islamic Persia was the insertion of glazed bricks into a pattern of unglazed bricks so it was natural to use the same material for both. Such bricks were basically composed of earthenware mixed with sand in locally varying proportions, which after firing, resulted in a firm, textured, granular product, usually light orange or buff in colour. Brick kilns were usually situated some distance outside a town, as at Tehran, where they were recorded in 13th/19th-century maps.[6] Tiles were also made of plain earthenware though this depended on the quality available.

More sophisticated materials, however, were widely used from about the 6th/12th century onwards, mainly inspired by the importation of Chinese porcelains of the Sung dynasty, which were much admired. As Persia had no deposits of porcelain clay, a composite paste was made as a substitute and used both in ceramics and tilework. Both Abu'l-Qāsim and ʿAlī Muḥammad Iṣfahānī give recipes for this paste from which it is clear that ingredients and method changed little. The basic material was white flint or quartz – *shukar-i sang*, 'sugar stone' according to Abu'l-Qāsim,[7] and *sang-i chaqmāq* according to ʿAlī Muḥammad Iṣfahānī. The latter specifies that it is found in the Zāyandehrūd river at Iṣfahān,[8] Nā'īn, Ardistān, Qum and in the Bībīshahrbānū hills near Tehran.[9] Also used was a white clay, *batāneh*[10] or *gil-i būteh*[11] found at Fīn village near Kāshān, at Vartūn near Iṣfahān and at Tehran. The third essential was an alkaline frit produced by melting and grinding a soda compound *shakhār*,[12] and adding *sang-i chaqmāq*.[13] The three ingredients were finely ground and mixed in the following proportions, 10 parts of *shukar-i sang*, 1 part of frit, plus 1 part of *batāneh* according to Abu'l-Qāsim,[14] while ʿAli Muḥammad Iṣfahānī recommended 8 parts of *sang-i chaqmāq*, 1 part of *gil-i būteh* and 1 part of frit.[15] This compound when fired produced a hard, granular fabric which varied in colour and texture according to the quality of materials used; early Saljūq paste for example was fairly coarse and fired to a pinkish colour while Safavid and Qājār pastes were a firm, even white.

GLAZE

Two main types of glaze were used based on powdered quartz, plus different fluxes; lead oxide produced a very fluid glaze while alkali added in the form of potassium oxide made a

clear glaze. Both Abu'l-Qāsim and ʿAlī Muḥammad Iṣfahānī gave recipes for alkaline glazes. Abu'l-Qāsim prescribed the fusion of the somewhat cumbersome ratio of 105 parts of powdered quartz with 100 parts of alkali produced by burning plant matter.[16] ʿAlī Muḥammad Iṣfahānī more explicitly described two kinds of glaze, one made by fusing equal parts of alkali and quartz, and the other by fusing 1 part of alkali with 1½ parts of quartz which would give a more glassy result.[17] ʿAlī Muḥammad Iṣfahānī also stated that both tin and lead should be added to an alkaline glaze after it has been fused and ground to opacify it. Generally an alkaline glaze was applied to the composite paste body resulting when fired in a well-fused combination, but there was no reason why both alkaline and lead glazes should not have been used on brick and earthenware fabric; there was more scope for variation than has hitherto been credited.

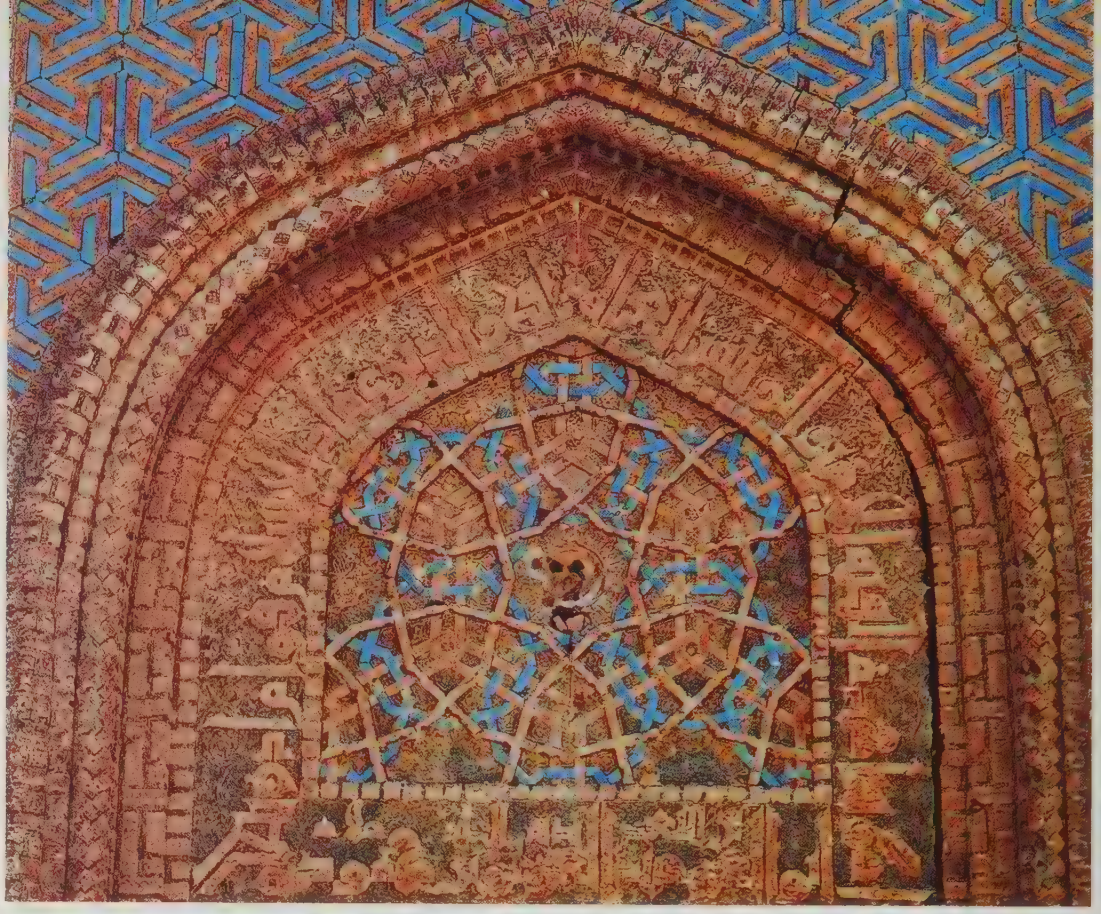
Various colouring agents were added to the colourless lead and alkaline glazes. The question of which minerals and pigments were used is complex as they varied according to what was locally available, what impurities were present, their reactions in alkaline or lead media, and the conditions of firing. The major colours used were turquoise, green, blue, aubergine, black, and yellow. Abu'l-Qāsim and ʿAlī Muḥammad Iṣfahānī agreed that cobalt ores from deposits in the Kāshān region, copper and manganese when added to an alkaline glaze respectively produced deep blue, turquoise and black.[18] Abu'l-Qāsim suggested a reduction in the amount of manganese to produce violet[19] while ʿAlī Muḥammad Iṣfahānī recommended gold and tin to produce red to which in turn cobalt could be added to give violet.[20] He also included a yellow made by mixing lead and tin.

The Persian tilemaker employed his repertoire of body materials, glazes and colours in three basic methods. The earliest, found in 5th/11th-century monuments, involved fitting rectangular and square bricks glazed in one colour, usually turquoise, into a plain black design. Gradually the range of colours was extended to include blue. From here there was a logical development to tile mosaic, where design was divided up into units, which were then cut from individual monochrome glazed tiles and fitted together to form a continuous patterned surface. This technique progressed in the Mongol period reaching its full development in quality of design and colour during the Timurid period. It continued however to be used extensively through the Safavid and Qājār periods. Other techniques involved the application of several colours to each tile either by overglaze or underglaze methods. The most commonly used overglaze technique was *cuerda seca*, 'dried cord', which is relatively quick compared with the laborious cutting of mosaic shapes, since it consists of painting relevant sections of the required design directly on to square tiles which are then fitted together.

A wide range of colours were used: blue, turquoise, yellow, aubergine, rose-pink, and grass-green. They were mixed with alkaline glazes which were kept separate by outlines of manganese mixed with a greasy substance which burnt away in firing leaving a matt surface. The development of *cuerda seca* is somewhat difficult to trace. Certainly the technique of decorating ceramics in meticulously applied overglaze colours which were fixed in a second firing, the so-called '*mīnāī*' technique, was known since the mid-6th/12th-century and Abu'l-Qāsim rather confusingly described the process.[21] Tiles in a simplified overglaze technique using fewer colours have been found at Takht-i Sulaymān in a context datable to 671/1272. Yet the technique really came into its own in the early 11th/17th century when its rapidity of execution caused it to be used extensively in Shāh ʿAbbās's grandiose building schemes, and it has been used since. ʿAlī Muḥammad Iṣfahānī described the process in his treatise detailing the composition of the glazes, and the two firings necessary.[22] The technique of lustre used in Persian ceramics since the mid-6th/12th century[23] may be described as a true overglaze method since it involved painting a design, in a paste of silver and copper oxides and sulphur mixed with ochre and vinegar, to the surface of a fired tile; after a second firing the ochre was rubbed away leaving a metallic golden yellow sheen. Underglaze painting as a technique was known early in Persian ceramics in the striking wares from Khurāsān and Transoxiana of the 3rd–4th/9th–10th centuries, whose designs were painted in brown slips before the application of the lead glaze. There is also a distinctive group of pottery of mid-6th/12th to early 7th/13th centuries, made in a composite paste and painted with elegant figure and foliage designs in cobalt-blue and black under a transparent colourless or turquoise alkaline glaze. The accomplishment of these vessels shows that the technique, although limited to the range of pigments that would withstand the heat required to fire pot and glaze in one firing, was well under the control of Persian potters. It is therefore curious that it was not similarly exploited in tilework. Apart from some isolated attempts it is not until the 13th/19th century that the technique was fully used in tilework where it was mainly confined to Tehran. These latter tiles were made in a hard white composite paste and colour scheme under a clear alkaline glaze in a repertoire of subjects which interestingly experimented with naturalism.

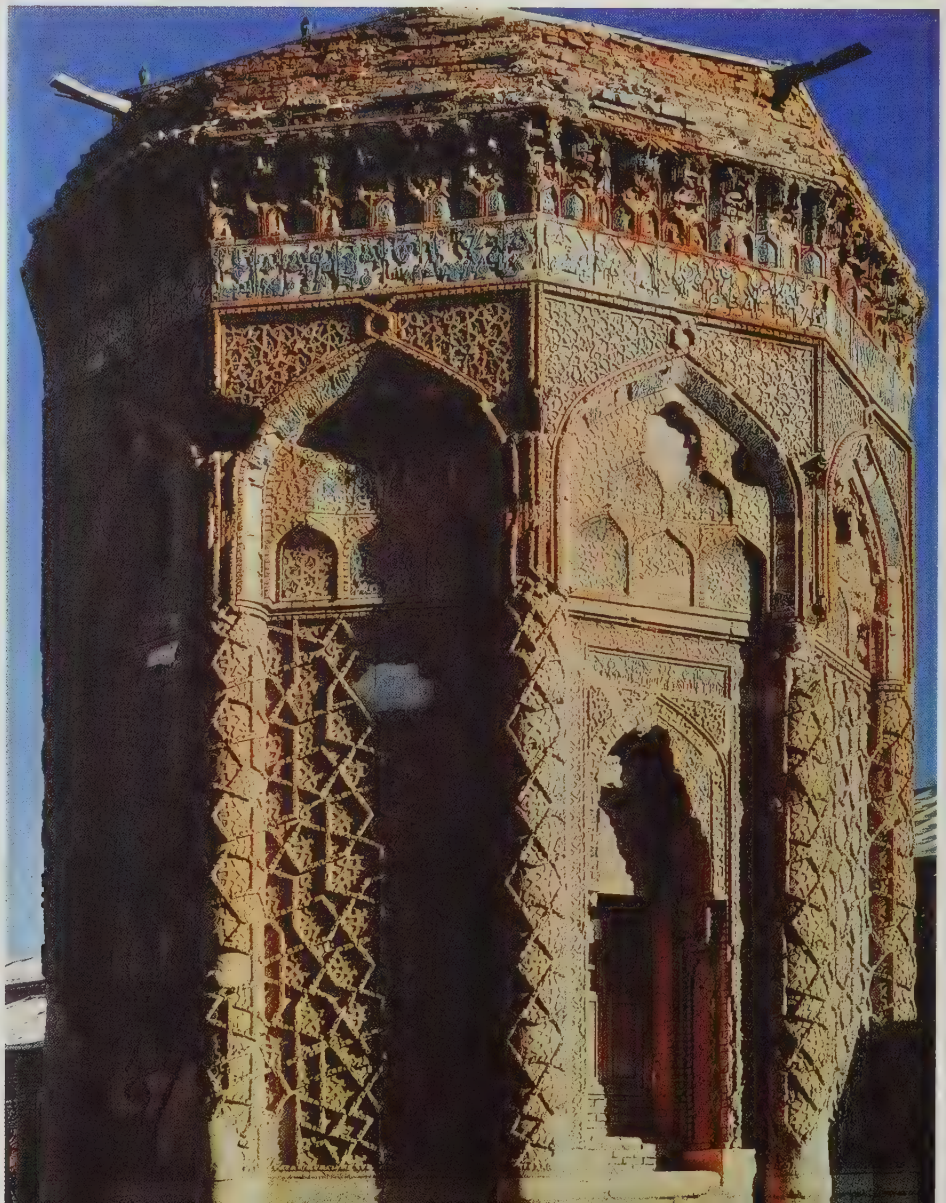


1. Dāmghān. Brickwork of Minaret of Masjid-i Jum'eh, *c.*450/1058.



2. Marāgheh. Gunbad-i Surkh, 452/1147. Mosaic tilework at entrance.

3. Marāgheh. Gunbad-i Kabūd, 593–1196. General view showing extent of mosaic tilework.





4. Glazed *miḥrāb* tile, dated 583/1189. Museum of Islamic Art, Cairo, 9773.

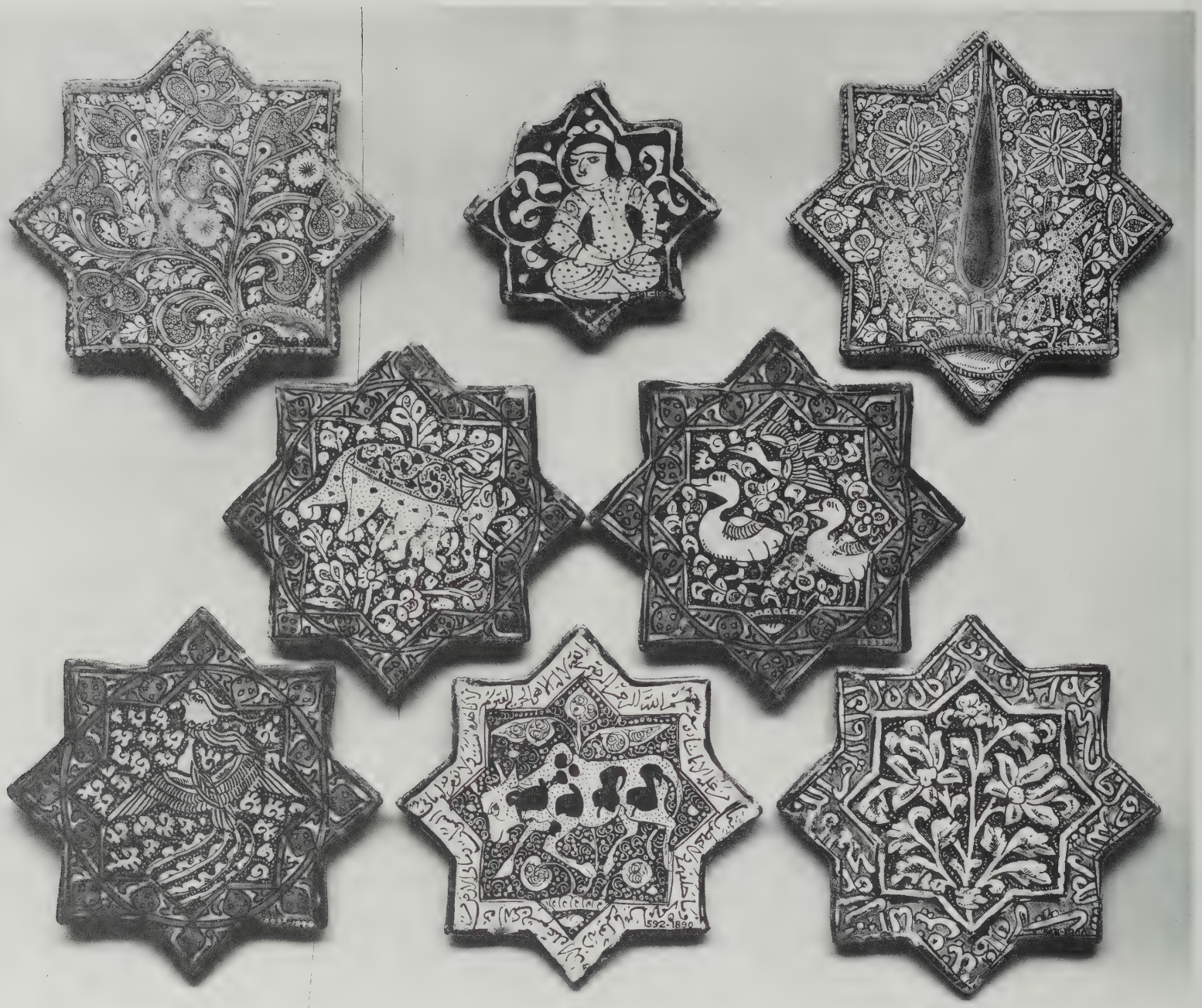
The earliest period of Islamic tilework ranges from 429–654/1038–1256, during which time Persia experienced the rule of the Saljūq Turks, the splitting of their domains into local kingdoms, and finally the devastations of the Mongol invasion and its aftermath. These centuries witnessed remarkable achievements in architecture and the decorative arts. The outstanding decorative feature of surviving buildings was the bold and imaginative working of brick into infinitely varied geometric and interlaced designs. It is as an extension to this type of decoration that glazed tile first appeared in the form of turquoise glazed bricks inserted into external designs, whose development can be traced through a group of dated monuments.[24] As yet, the earliest recorded building with glazed tile decoration is the minaret of the Masjid-i Jum'eh of Dāmghān, attributed to about 450/1058 by comparing its brickwork patterns with those of dated monuments (pl. 1).[25] The tilework is confined to a ribbon-like band of rectangular turquoise glazed tiles encircling the tip, each moulded in relief with neatly interlacing Kufic script. The dome chamber of the Masjid-i Jum'eh at Qazvīn dated 509/1115 illustrates the first hesitant use of tilework as an interior decoration where it is confined to small, drop-shaped pieces of turquoise tile set into a band of curved leaves cut from plain brick.[26] The minaret of Sīn near Iṣfahān[27] dated 526/1131 has a band of Kufic inscription where the letters are blocked out in narrow turquoise glazed bricks, which effectively contrast with the matt texture of the background.

A group of tomb structures at Marāgheh in north-west Persia, however, offers more scope for ornament in which glazed tiles and brick are successfully integrated into a harmonious pattern. In the earliest tomb, the Gunbad-i Surkh built in 452/1147 strips of turquoise glazed tiles are confined to the spandrels and tympanum (pl. 2) of the entrance. They are composed into a bold repeating design of intersecting Y shapes on an equal level with the brick ground. Their use is more flexible in the tympanum where they interweave on a secondary level below the relief of the brick design of overlapping polygons. Both the area covered by tilework and the fluency of design have increased in a later tomb, the Gunbad-i Kabūd dated 593/1196. Here the tilework encircles the top of the building in a band of interlaced inscription in which the letters have been cut into the required shape rather than awkwardly fitted together in strips (pl. 3). The spandrels and facets of the sides are picked out in star patterns of brick and tile intertwined. While the evidence presented from these monuments is limited in that they are not sufficient to enable any satisfactory classification of regional variation to be made, and they do not give any information about the possible use of tiles in secular buildings, they at least demonstrate a steady progression towards a more expert articulation of technique and complex pattern.

Apart from the decoration on monuments, information concerning technique and motif can be gained from tiles no longer in their architectural context, although they are not helpful in building up any picture of local development unless an inscription gives details of place of manufacture, craftsman's name etc. For this period tiles and ceramics ran parallel. Monochrome ceramics were made, for example, finely potted in the newly developed composite paste body, moulded in relief with designs of foliage scroll, animal friezes and calligraphy, and coated with a deep turquoise or blue alkaline glaze. They are considered to have been made principally at Rayy, though without further evidence it would be rash to rule out the possibility of other centres. Comparable production in tilework took the form of moulded tiles shaped into interlocking stars and crosses for use as interior wall friezes. Monochrome tiles were also made up into rectangular slabs moulded with the design of a pointed *miḥrāb* niche containing a lamp and framed in a border of inscription usually quoting verses from the Qur'ān and occasionally a date (pl. 4). One example in the Museum of Islamic Art in Cairo, is dated 583/1189, which indicates that this style was already current in the 6th/12th century.

Perhaps the most spectacular decorative technique to progress during this period was that of lustre painting, which on the evidence of a bottle dated 575/1179 was practised in Persia by the mid-6th/12th century. The bottle is made of a fine textured whitish composite paste covered with an opaque and pitted white alkaline glaze. The design, painted in lemon-brown lustre, concentrates on two rather muddled bands of sketchily painted human figures seated among blobs and dots and running cheetahs. This lustre style, associated with the centre of Rayy from which many sherds have been recovered although the site has never been adequately published, developed into designs of considerable panache and vigour, particularly well shown by a series of bowls and dishes painted with bold figures of horsemen galloping through forests of foliage. The use of lustre thus introduced a pictorial element to ceramic design which was to be followed up quickly in tilework.

Lustre tiles were a luxury product and reserved for interior use where they were made up into continuous friezes of interlocking stars, crosses and hexagons, each painted with



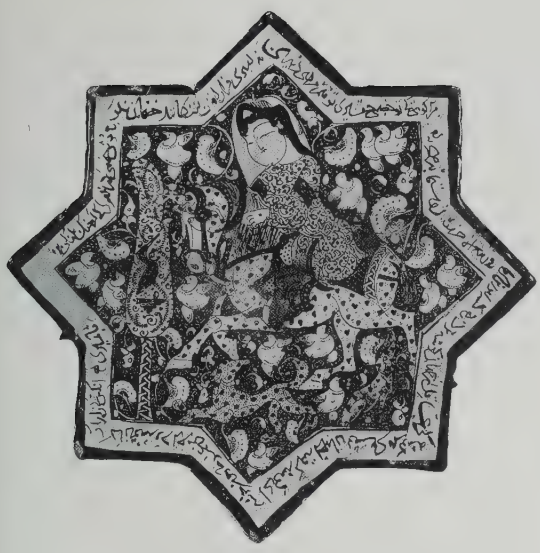
5. Lustre tile, Rayy type, late 6th/12th century Victoria and Albert Museum, London, 591–1890.



6. Lustre tile, Rayy type, depicting Rustam's rescue of Bīzhan, 6th–7th/12th–13th century. Keir Collection, London.

individual designs comparable to those found on ceramics. A small star-shaped tile for example of 6th–7th/12th–13th centuries date (pl. 5), is filled with a seated figure against a background of bold foliage. More colourful variations were possible by painting the lustre designs over a blue or turquoise glaze. One unusual square tile (pl. 6) demonstrates the use of narrative scenes as a design subject. It is painted in the Rayy style with an asymmetrical composition depicting a small brick tower in which a youth is crouching with a large turbanned man approaching from the left. Both elements are skilfully linked by foliage scroll which coils around them. An inscription in the top right hand corner identifies the scene: 'the coming of Rustam to the top of the well', which surely illustrates Rustam's rescue of Bīzhan as described in the *Shāh-nāmeh*. The rareness of this tile arouses much speculation. Was it one of a series depicting various episodes from the *Shāh-nāmeh*? How important was epic poetry as a source of subject matter? The style of painting is comparable to that of the few miniature paintings of the period which have survived, which may well argue for a close link between the two media.[28]

The full development of lustre as a means of tile decoration was seemingly concentrated at Kāshān. On the evidence of contemporary writers and of the number of dated pieces, which have been attributed to it, several inscribed with the name of the town and craftsmen's signatures, Kāshān was a flourishing centre manufacturing both ceramics and tiles. The distinctive features are a hard, fine-textured, white composite paste body with lustre



7. Lustre tile, Kāshān, dated 607/1210 and signed by Abū Rafaza. Museum of Fine Arts, Boston.

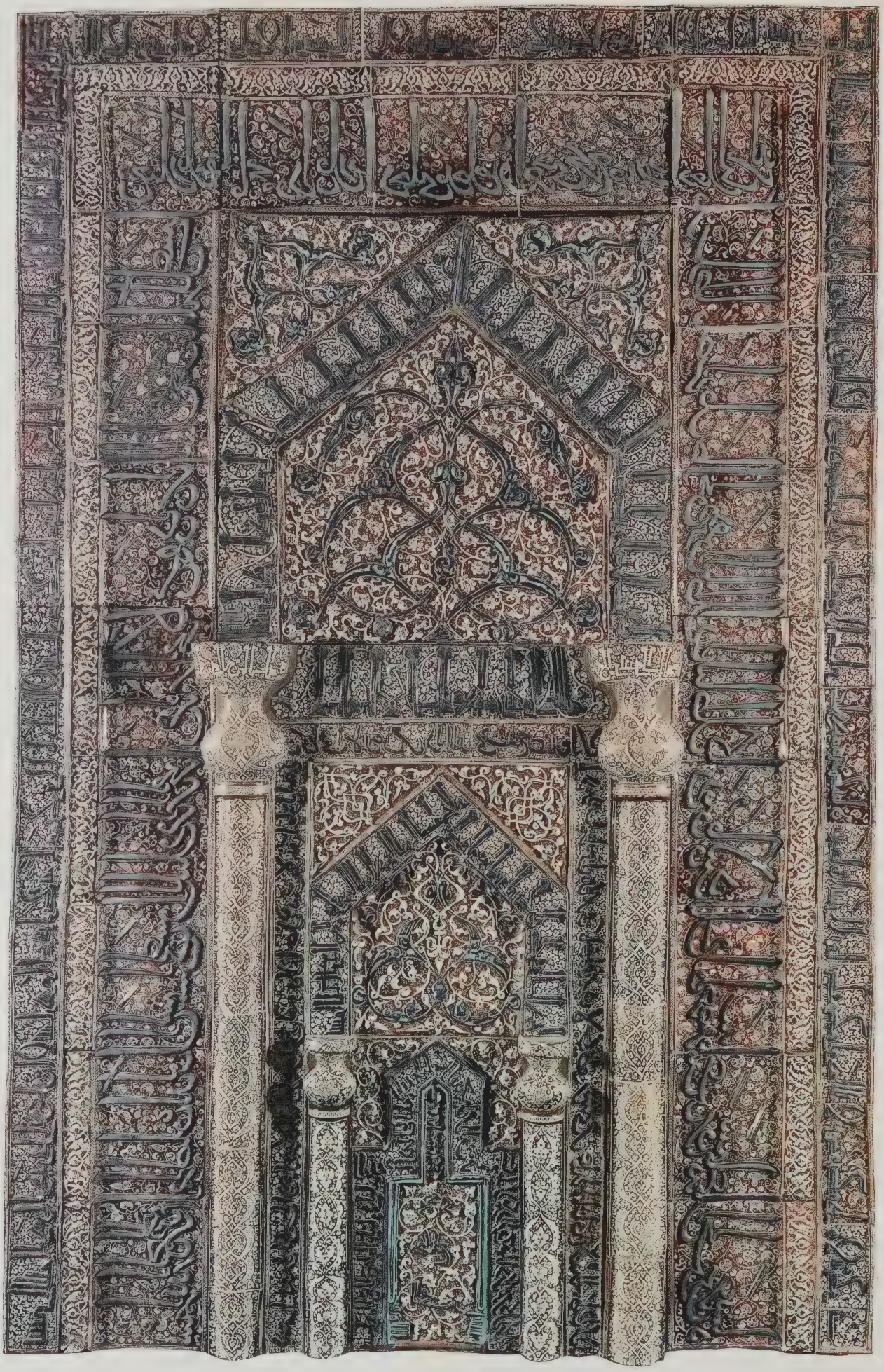


8. Lustre tile, Kāshān, dated 608/1211 and Signed by Abū Rafaza. Museum of Fine Arts, Boston.

designs painted in a more meticulous style than on Rayy wares. The intention was to create an evenly textured surface rather than a dramatic contrast of lustre against glaze. Lustre areas, therefore, were incised with minute spiralling leaves and white areas are filled in with fine detail in the form of continuous dots, spirals, scrolls, crosses etc. Signed and dated Kāshān tiles indicate that production continued through the 7th and 8th/13th and 14th centuries.[29] and was seemingly monopolised by three generations of the Abū Ṭāhir family. Tiles from their workshop are recorded from widely diffused locations in Persia attesting to a continuous demand for their specialist skills.

Kāshān tiles were made into friezes of interlocking stars and crosses and into superb *miḥrāb* niches. Various technical refinements were combined with the lustre painting such as the use of moulded relief and in-glaze painting in turquoise to emphasise design elements. The earliest as yet recorded example is a star-shaped tile painted with four seated figures and dated 600/1203, indicating that such work was in production by the end of the 6th/12th century. The earliest dated group of tiles *in situ* occurs in a frieze in the shrine of Imām Rizā at Mashhad; it is dated 612/1215 and signed by Muḥammad bin Abū Ṭāhir bin Abu'l-Ḥusayn. One of the most significant pieces of Kāshān lustre, however, is the complete *miḥrāb* from the Masjid-i Maīdān at Kāshān signed *Al-Ḥasan ibn ʿArabshāh* and dated 623/1226 (pl. 9) which merits examination in some detail as it illustrates typical features of construction and style. Considerable skill was required in shaping, firing and assembling what was essentially a large ceramic sculpture; upper and lower niches, columns and surrounds were all made separately and neatly fitted together. In-glaze painting was used to add colour; here the scrolling stems and calligraphy were painted under an opaque white glaze in turquoise and blue pigments respectively which rose to the surface during firing to give an attractive diffused effect. Lustre was added for a second firing. The design element of graceful arabesque scrolls moulded in relief in the niches and trained to fill the triangular spaces of arch spandrels carefully emphasise the structure, while as an effective contrast bands of calligraphy in Kufic and *naskh* scripts frame the *miḥrāb*. The design is resolved into several levels, beginning with a teeming background of lustre-painted scrolling and spiralling foliage, followed by interlacing arabesque scrolls in white relief, and finally with the arabesques and calligraphy in blue. The combination of boldly coloured letters against a lustre ground represents colour values comparable to the use of turquoise tile shapes against plain brick that occurs in 6th/12th-century monuments, though here it is executed in more sophisticated techniques.

In the friezes of stars and crosses each tile had its own independent design, bordered with a cursive inscription in lustre on white which usually contained quotations from the Qur'ān, verses of poetry and occasionally some historically useful information such as date, name of maker and place of manufacture. Themes ranged from human figures to animals centrally placed among a background of finely delineated foliage. Two pieces dated 607–8/1210–11 both signed by Abū Rafaza (pls. 7–8) show respectively how an equestrian figure and a pair of seated figures were carefully positioned and framed in large fan-shaped fronds of foliage with doves among them; the pose of the seated figures is classic with parallels in both contemporary ceramics and the few surviving miniature paintings. Figure subjects were not however invariably featured in symmetrical and independent compositions, as two square tiles exist (pl. 10) both painted with groups of seated figures arranged obli-



quely.[30] Possibly such groups formed part of a larger scene based on a central figure such as a ruler surrounded by his court; there are parallels in paintings for this type of composition, which anticipates the large narrative panels of Safavid and Qājār times where the designs were sectioned off into squares for translation into tilework.

The last ceramic technique to have influenced tilework was *mīnaī* in which intricate figure compositions were painted over the glaze in coloured enamels and then fired. It was a fretful technique, expensive and time-consuming to execute, and comparatively little of it has survived. Its most provocative quality lies in its probable relationship to contemporary painting, from which it may have drawn its iconography and colour values. Its seems on the evidence of dated pieces to have been produced for only about a century, from 575–640/1179–1242[31] and the problem of the centre of its manufacture remains unsolved; stylistic analogies with Kāshān lustre wares have been advocated but are as yet unproven. The *mīnāī* technique was rarely applied to tiles but there are a few pieces of rather curious interest, including a twelve-pointed star, obviously a unit in a complex geometrical design, which is painted with a centrally-based composition of a mounted warrior in combat with a dragon (pl. 11).



10. Lustre tile, Kāshān, 6th–7th/12th–13th century. Freer Gallery of Art, Washington, D.C., 09.118.



11. *Mīnāī* tile, late 6th/12th century. Freer Gallery of Art, Washington D.C., 11.319.

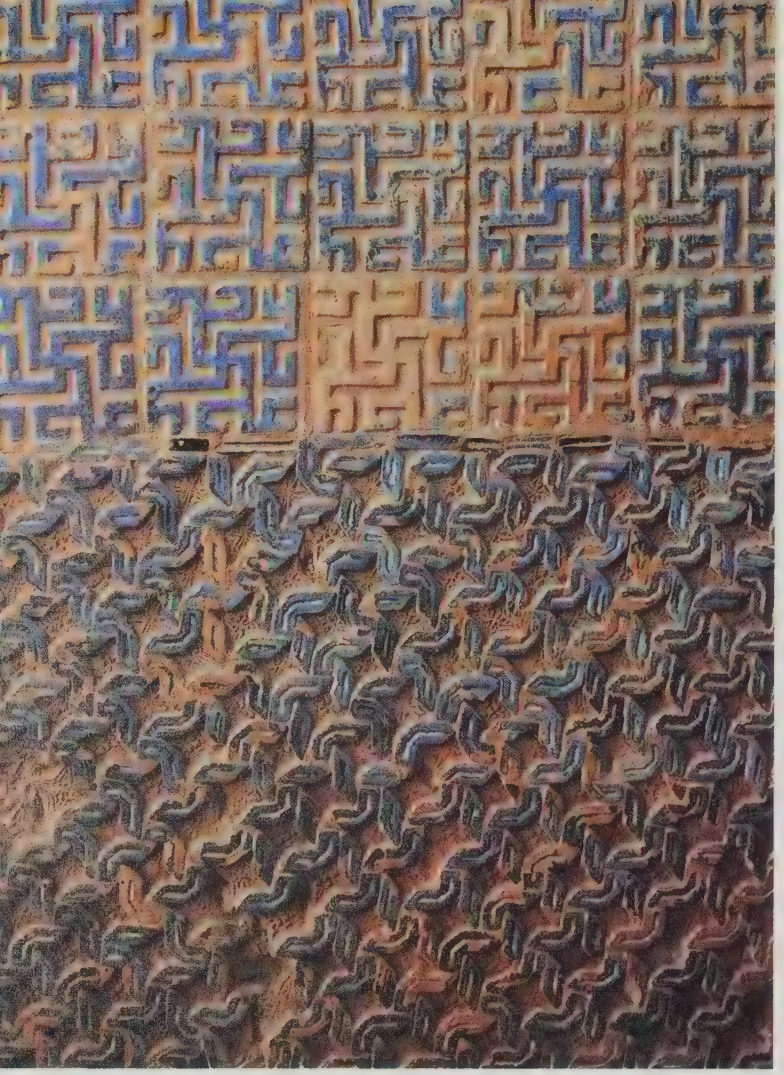
IL KHANID TILEWORK

The 6th-/12th- to early 7th-/13th-centuries had clearly been a time of great invention and experiment technically. During the period after this Persia witnessed the consolidation of Mongol rule under the Īl-khāns (654–736/1256–1336) and the subsequent establishment of powerful rulers in the west and south – the Jalayirids (736–835/1336–1432) and the Muzaffarids (713–95/1314–93). The Mongol invasions, though far-reaching in the destruction and upheaval which they caused, had not totally disrupted Persian life, at least not at the level of ceramic and tile production. Some proof of this is revealed by a number of dated pieces made during the interregnum after the Mongol invasions of 616/1219 such as the splendid Kāshān lustre *miḥrāb* of 623/1226. Their settled rule provided a fresh stimulus to production and in fact the period is now seen to be one of great creativity in which the techniques and styles of the Saljūqs were further developed and elaborated. It is somewhat easier to chart the evolution of tilework as more monuments have survived[32] and there is also supporting evidence from other media such as painting for the sources of design.

One of the most significant advances was the development of tile mosaic from comparatively restrained motifs in turquoise glazed tile to full polychrome designs which completely covered a surface. In the buildings of the 7th/13th century the Saljūq decorative tradition of Kufic inscriptions worked in turquoise tile against a plain brick ground continued; this can be seen in the tomb tower of ʿAlā'al-Dīn at Varāmīn dated 688/1289. Gradually, however, mosaic tile patterns became more fluent and were combined first with insets in carved and moulded stucco instead of plain brick alone and new colours were introduced. The portal of the sanctuary of Bāyazīd Bisṭāmī constructed at Bisṭām in 713/1313 demonstrates the skilful contrast of two types of pattern (pl. 12). The first type consists of squares of turquoise tile made up into four radiating names of ʿAlī in Kufic script against brick; these motifs resemble the seal characters of Chinese calligraphy, a device probably introduced by the Mongols. Below them is a continuous small-scale pattern made up of sickle-shaped turquoise tile-pieces set together to give an impression of a lattice of twisted ribbon with insets filled with stucco carved in star patterns, all of which creates a richly textured surface.

Further contributions to the repertoire of 8th/14th century mosaic tiles are seen at Naṭanz where a complex of buildings consisting of mosque, saint's tomb, and dervishes' monastery was built between 704 and 725/1304 and 1325. Here again the delight in continuous and closely textured surface is visible, together with the addition of blue to the colour scheme. The entrance to the dervishes' monastery dated 704/1304 is especially striking in the choice of design (pl. 13). Basically it consists of two parallel vertical bands on each side – one of stripts of turquoise glazed brick worked into angular and interleaved Kufic letters against a sunken ground of blue tiles, the other of letters in a cursive script in beige stucco reserved against continuous blue and turquoise checks. Both show the ease with which a surface could be tiled in complete mosaic and the potential of contrasting different styles of calligraphy. The minaret of 725/1325 is encircled with a Kufic inscription worked in plain brick against a background of blue and turquoise tile mosaic pieced together in an interlocking foliage design. Obliquely spiralling bands of Kufic inscription in turquoise and blue enfold the minaret's shaft again on a plain brick background. The contemporary mausoleum of Öljeitü built at Sulṭāniyyeh in 707–15/1307–13, one of the most magnificent buildings of Persian Islamic architecture, is a landmark in tile decoration as it employs a complete surface

9. Lustre *miḥrāb* from the Masjid-i Maydān, Kāshān, dated 623/1226. Berlin Museum.





12. Bisṭām. Shrine of Bāyazīd Bisṭāmī, 713/1313. Tile mosaic on south-west of entrance portal.

13. Naṭanz. Entrance to dervishes monastery, 704/1304. Detail of the mosaic.

of mosaic in blue, turquoise, white, and black. It also illustrates a most ambitious and widespread use of tiles to cover large areas on both interior and exterior; the great dome, for example, was originally a shining mass of turquoise glazed brick while the interior revetments show designs of controlled complexity worked in tile and stucco. Later 8th/14th century monuments saw the introduction of more new colours and plant motif into mosaic design. At Iṣfahān the Imāmzādeh Bābā Qāsim completed in 741/1341 (pl. 15) added green and purplish-brown to the mosaic colours, while the design mingled inscription bands in *naskh* calligraphy with the graceful foliage of interlacing arabesques. The inclusion of a golden-yellow in the mixed foliage and geometric patterns of the mosaic lining the entrance vestibule of the Masjid-i Jumʿeh of Kirmān dated 750/1349 completed the classic colour scheme of tile mosaic.

14. Lustre tile, Kāshān, dated 739/1339. British Museum, London, OA 1123.



Apart from advances made in the handling of polychrome mosaic the types of tilework current in the Saljūq period continued, sometimes without much transition in style and theme, and sometimes with considerable innovation. For instance, the manufacture of *miḥrāb* niches and friezes in moulded turquoise monochrome tile continued with little change using motifs of arched niche and calligraphy, as shown by an example dated 716/1316.[33] On the other hand further developments in lustre painting are shown by a series of dated pieces ranging from 658 to 761/1259 to 1339 including several with the signatures of the Abū Ṭāhir family of Kāshān. Lustre tiles installed in widely distant localities in Persia, such as Qum, Dāmghān and Varāmīn,[34] attest to the demand for them as *miḥrabs*, tombstones, and continuous revetments; as in the previous centuries their use was reserved for interiors.

Two star-shaped dated tiles are of particular documentary importance. One (pl. 14) whose original provenance is unknown, is inscribed 'in the year 739 [AD 1339] in the place Kāshān, may God (be He exalted) protect it from the accidents of time'. The other from the Imāmzādeh Jaʿfar at Qum[35] is even more informative – 'It was written on the 10th of Rabīʿ II 738 [6 November 1337] in Kāshān in the factory of Sayyid Rukn al-Dīn Muḥammad ibn Sayyid al-Dīn ʿAlī (deceased) al-Ghazayʿrī, the faience maker. The work of the revered and respected master, Jamāl-i Naqqāsh.' The obvious significance of these two pieces is that



15. Iṣfahān. Imāmzadeh Bābā Qāsim, 741/134. Detail of tile mosaic.

they directly relate the manufacture of lustre tiles to the town of Kāshān and give some information about the number of craftsmen involved.

Despite generally insufficient evidence concerning the nature and organisation of the tile industry, however, the pieces themselves show that a considerable change in pattern and design occurred during the period following the Mongol invasion. Revetments and *miḥrābs* still continued to be manufactured with elaborate schemes of inscriptions picked out in relief against a lively background of foliage, but new motifs intruded. Especially noticeable are the soft, feathery, shaded leaves, lotus, and peony flowers, motifs of Chinese inspiration which were transmitted into Persian art by the Mongols and thus greatly enriched its repertoire. This combination is demonstrated by a miniature painting from a manuscript of Rashīd al-Dīn's World History completed at Tabrīz in 706/1306[36] illustrating a Mongol seated on a throne. The textile covering him has a design of soft foliage and flowers and is treated as in the later pieces of lustre tile (pl. 16).



16. History of Rashīd al-Dīn, Tabrīz, 706/1306. Sulṭān Luhrāsp enthroned.

The treatment of figure subjects in star-shaped tiles also leads to fresh interpretations of traditional themes. For example, in the tile mentioned above dated 739/1339 the composition is superficially based on the traditional balance of two seated figures. The scale of the figures, however, is larger and the drawing coarser than in earlier examples. The costumes are of great interest as they consist of wrapover patterned robes, the traditional Mongol riding dress which developed into the formal dragon-robe of the late Chinese court culture, and the feathered Mongol cap. The composition is no longer self-contained but it is extended by the heads of two figures flanking the principals; it is as if a star-shaped frame had been fitted over the scene which was then arbitrarily cut off at the limits of the area enclosed. Other subjects in the repertoire of lustre-tile decoration included large-scale treatments of peony and lotus, lobed foliage magnified into fern-like fronds, and animals (hares, cheetahs, foxes, ponies) gambolling among foliage.

By the Mongol period the expensive and elaborate *mīnāī* technique had become simplified into the so-called *lājvardīna* technique in which designs in a more limited range of colours were painted onto a turquoise or blue glazed ground; pieces of gold leaf were often added to enrich the design. Some of the most interesting and fine tiles of this type were excavated at Takht-i Sulaymān in north-west Persia. They were found together with both lustre and monochrome tiles in a lavish frieze ornamenting the kiosk of the ruler Abaqa Khān (663–680/1265–82). The brilliant repertoire of motifs included Chinese-inspired dragons (pl. 17) and phoenix among cloud scrolls and lotus bands.[37] Several of the tiles are inscribed with the date 671/1272 indicating at least a possible lower date limit for the inclusion of motifs and technique in the tilework decoration of architecture. Moulds for tiles were also excavated at the site thus providing evidence of local manufacture. On this basis it would seem feasible to consider that much more tile production was produced in small local units (as today) than in a few large centres. Providing the materials required were locally available, kilns could have been set up and then dismantled when a building was complete. Certainly, this way there would have been less risk of breaking expensive tiles than by transporting tiles over long distances. Further analysis of the materials of tiles might reveal differences in composition to support this hypothesis.



17. *Lājvardīna* tile from Takht-i Sulaymān, 7th–8th/13th–14th century. Īrān Bāstān Museum, Tehran, 21723.

The last technique as yet known to be employed in tilework was that of underglaze painting though curiously little has survived to allow more than a tentative outline of its development. This is somewhat strange as underglaze painting in black and blue on a fine white composite paste body under a transparent alkaline glaze had been used in a most accomplished and refined way to produce ceramic wares of great beauty during the late 6th/12th and early 7th/13th centuries. In contrast to the lustre technique, it appears that underglaze painting was used in an extremely limited manner as only a few tilework examples can be found from the Mongol period. It was used in Öljeitü's mausoleum at Sulṭāniyyeh, as pieces have been found with foliage designs moulded in relief outlined in black, and reserved against a blue painted ground under a transparent glaze, clearly paralleling the style found in contemporary ceramics. A fragment, executed in the same technique, of an inscription bounded by a border of lotus flowers may be attributed to the early 8th/14th century, by comparing it with a similar treatment of floral motifs in contemporary dated lustre tiles. On examination however the technique is seen to be unreliable; the cobalt-blue pigment especially had a tendency to run in firing which would only be masked to a certain extent by the black outlines. Perhaps the uncertainty of technique at this stage in its evolution prevented its extensive use.

TIMURID TILEWORK

The world which provided a fertile environment for such a rich development of tilework was abruptly shaken by yet another invasion from Central Asia in the late 8th/14th century led by Tīmūr at the head of his Chaghatai Turks. Briefly, he and his successors ruled a large empire concentrated on north-east Persia and west Afghanistan, with its main centres at Herat and Samarqand, which survived until the early 10th/16th century (771–912/1370–1506). It did not remain unified, however, as its power was successfully challenged in the north-west by the Qara-Qoyunlu (782–873/1380–1468) and the Aq-Qoyunlu (780–914/1378–1508). Architecture was patronised on a grand scale and was concentrated by the Timurids in Herat, Samarqand and Khurāsān. Significant buildings were also constructed by the rival Qara- and Aq-Qoyunlu from Tabrīz down to Iṣfahān. The outstanding and dominating decorative medium was tile mosaic which emerged as a means of covering the entire surfaces with brilliant colour worked into complex designs. The 9th/15th century achievement was to employ the Mongol colour scheme in tones of intense richness to create magnificent patterns blending and balancing an accumulated repertoire of calligraphy,

geometric motif, and interlacing foliage, and flowers of Chinese origin. The gradual evolution of this tile mosaic can be traced through a selection of dated monuments.[38]

One of the most impressive and earliest Timurid buildings to show the brilliance of tile mosaic is the mausoleum of Gauhar Shād in Herat built between 820/1417 and 835/1432. Although damaged, enough remains to show how the ribbed dome (pl. 18) was covered completely with bricks glazed in deep turquoise, blue, golden yellow, and white, worked in a stepped lozenge pattern. On the minaret of the mosque at Mashhad the brickwork is patterned with triangular-shaped tiles. The Madraseh of Khargird built in 848/1444 illustrates the successful combination of several styles of tile mosaic. The external walls are given visual interest by being broken up into a series of blind arches, filled with strong repeating patterns of interlocking herring bones and lozenges worked in blue and turquoise tile against a matt brick ground. They are flanked by verticals, each consisting of a single band of repeated lozenge motifs. Within the main entrance a more fluent treatment of mosaic is seen, where the arch is filled with a patchwork of octagons and diamonds worked in strips of turquoise and blue tile against unglazed tiles. The use of a complete surface of tile mosaic is seen in the narrow bands bordering the inner arch where cursive interlaces of graceful quatrefoils in yellow and turquoise are reserved on a deep blue ground punctuated by lotus-like flowers all cut with extreme delicacy and precision.

A rather more flamboyant form of this fluent style of tile mosaic is found in the Masjid-i Jumʿeh of Iṣfahān where a doorway on the west side was decorated in 851/1447. Here the tilework was carefully divided into units of design appropriate to the surfaces covered. The door itself is framed in a continuous band of white quatrefoil foliage composed in a mesh-like fashion over a rich ground of yellow trefoils among fine turquoise tendrils; this pattern is adapted and extended to cover the panels flanking the entrance. The tympanum of the arch is reserved for more emphatic treatment, in the form of symmetrical spirals of bilobed foliage in white overlaying a secondary layer in golden yellow, interwoven with peony and lotus flowers. Another portal in Isfahān, that of the shrine of Darb-i Imām 857/1453, was also decorated with polychrome tile mosaic in the same tradition.

For the further development of tile mosaic it is necessary to examine the so-called Blue Mosque built at Tabrīz in 870/1465 by Salīḥa Khānum, the daughter of Jahānshāh of the Qara-Qoyunlu. The mosque was lavishly decorated with tilework both on its exterior and interior surfaces, showing a wider range of design and colour combination than has yet been seen in 9th/15th century monuments. The impressive portal was sheathed in vertical panels of interlaced foliate cartouches and bands of cursive *naskh* calligraphy. Closer study of this tile mosaic reveals meticulously cut pieces combined with foliage leaves raised in relief to create an effect comparable to the surface of a padded and richly embroidered textile (pl. 19). Within the mosque similar detail was observed. Here the tilework was sectioned into panels lining the supports of the dome and worked in schemes of repeated foliage lozenges against a matt brick ground or a mesh of inscription cartouches in yellow and black and foliate medallions in yellow and green, imposed over a continuous ground of delicate spirals of lotus scroll in turquoise and white (pl. 20).

In both cases careful zoning of colour disciplined the richness of the design. In contrast to all this elaborate tracery the lower walls were covered with friezes of severely controlled star patterns worked in striking contrasts of black and white (pl. 21) and turquoise and white. A final example of the range of 9th/15th-century mosaic may be seen in the Masjid-i Jumʿeh of Iṣfahān, where panels were inserted in the south-west *īvān* by order of the Aq-Qoyunlu ruler Uzun Ḥasan in 880/1475. This continued the meticulous detailed treatment of the Blue Mosque but was trained into repeating designs of interlocking stars and crosses outlined in white on deep blue and punctuated by open peony flowers. Reserved on this ground are raised shapes, octagons, pentagons, stars, covered in turn with mosaic in lobed foliage and Kufic calligraphy devices. The total effect is less harmonious than in the Blue Mosque, arguing for a divergent local tradition.

This resplendent tile mosaic completely overshadowed other techniques of tile manufacture, as little has survived in relation to the quantities from earlier periods. What does exist, for example in lustre painting, is markedly inferior in both quality and imaginative design. A group of rectangular tiles used as building plaques and tombstones dated between 860/1455 and 902/1496 shows the simplified features of late lustre ware.[39] Generally designs were based on pointed niches containing arrangements of flowers or rows of inscriptions. Certain elements such as the frames of the niches were moulded in relief and coloured blue, while soft-leaved foliage and open flowers were reserved in white on a reddish or brown lustre ground, in the style derived from late 8th/14th-century pottery. Some isolated examples lacking details of provenance in the British Museum may be attributed to the 9th/15th century and illustrate a further simplication in style and technique. They were made up in a fine buff paste containing a large proportion of earthenware clay and glazed





18. Herat. Mausoleum of Gauhar Shād, 820–35/1417–35. Mosaic and *cuerda seca* techniques used on dome and drum.

19. Tabriz. Blue Mosque, 870/1465. Detail of lithograph from *Description de l'armenie, la Perse et la Mesopotamie*, C Texier, Paris, 1842.

20. Tabrīz. Blue Mosque, 870/1465. Tile mosaic panel on interior.

21. Tabrīz. Blue Mosque, 870/1465. Geometrical tile mosaic frieze on interior.







22. Iṣfahān. Mausoleum of Hārūn Vilāyat, 918/1512. Tile mosaic in entrance.

23. Iṣfahān. Masjid-i Shaykh Luṭfallāh, 1011–28/1602–18. Tile mosaic design on dome.

with a white alkaline glaze. Lustre designs, usually based on simple radial segments of floral or leaf motifs, were painted in a dark chocolate-brown colour with no attempt to create textural variation by stripling and incising.

The technique of overglaze painting, which had become progressively simplified, had on present evidence, died out both in ceramic and tile decoration by the mid-7th/13th century at the latest. Although mosaic was so evidently the major form of tile decoration there is some indication that another form of overglaze painting, the *cuerda seca* technique was tried out during the 8th/14th century. In an era whose fashionable taste was for covering all surfaces with tile, the advantages of *cuerda seca* were obvious as it was much quicker to prepare than tile mosaic. It was not to be fully exploited until Safavid times, but meanwhile it is interesting to see the steps taken towards achieving it. The earliest as yet recorded examples seem to indicate that the technique was first used in tilework outside Persia as there are hexagonal tiles from the Madraseh of Bībī Khānum at Samarqand built between 802/1399 and 807/1604 with patterns worked in blue, turquoise, and white-and-red glaze with some areas in gold leaf appliqué.[40]

A more explicit use of *cuerda seca* is found *in situ* at Gauhar Shād's mausoleum at Herat built 820–35/1417–32. A careful examination of the frieze of tiles at the base of the ribbed dome reveals that the repeating panel design of lotus and peony medallions in white and turquoise against a rich blue are in fact formed of rectangular adjacent tiles on each of which a design section is painted in overglaze *cuerda seca* (pl. 18). The colours lie thickly on the tile surfaces and the dividing lines between them can be clearly seen instead of the fine cobweb of short lines which are found in tile mosaic. The first impression is misleading however as the designs so closely resemble those of tile mosaic.

SAFAVID TILEWORK

The achievements of 9th/15th century tilemakers were to have a permanent influence on Persia's architectural decoration in technique, richness of colour scheme, and design repertoire. Persia was united in 970/1501 under Shāh Ismāʿīl Ṣafavī, the first of a line of shāhs who ruled until 1145/1732. A visible result of this stability was a consistent patronage of architecture concentrated at Iṣfahān, which became the dynasty's capital in 1007/1598. Of the few early Safavid buildings which have survived,[41] the most important from the point of view of its tilework decoration is the mausoleum of Hārūn Vilāyat at Iṣfahān whose portal inscription records that it was built during the reign of Shāh Ismāʿīl in 918/1512. This portal shows the strength of the legacy of 9th/15th century decoration which has already been seen in Iṣfahān's dated monuments (pl. 22). It is lined with panels in complete tile mosaic whose principal design elements consist of a two-plane lattice of graceful, intertwined and spiralling foliage stems worked in golden-yellow and turquoise, bearing peony and lotus blossoms in white and green. All this foliage is trained out of a flamboyantly curved vase in green decorated with interlaced yellow foliage. Although the intention was to create a rich and evenly textured surface, certain differences, revealed in exaggerated curves of the vase motif and the boldly emphasised rather flat quality of the flowers, distinguish this work from its predecessors.

The establishment of Iṣfahān as his capital by Shāh ʿAbbās I by 1006/1598 was a turning point in the history of Persian architecture and its decoration; for the first time there is a coherent group of dated buildings concentrated in one area spanning a reasonable time period. Shāh ʿAbbās's ambitions for his capital realised themselves in an impressive group of buildings built between 1007/1598 and 1038/1629, concentrated around his vast square, the Maydān-i Shāh. To a lesser extent his successors continued his building policies finishing with the great Madraseh-i Mādar-i Shāh built 1118–26/1706–14. Not only can the development of tile decoration be compactly studied through a group of Muslim religious buildings but there are also the interesting variations observable in the few surviving secular buildings and in the contemporary Christian churches at Iṣfahān's Armenian quarter of New Julfā. Before discussing such buildings, however, it is important to state that while tile mosaic continued to be used, *cuerda seca* really came into its own reputedly through Shāh ʿAbbās's impatience to see his great building programme completed. A qualifying note of caution should preface any discussion. These buildings are rightly considered national treasures and are therefore continuously maintained and restored. This means that large areas of tilework have been re-faced with mosaic and *cuerda seca* which, although competent and skilled work in the Safavid tradition, must be recognised as such.

The earliest of Shāh ʿAbbās's monumental buildings to be decorated with tiles is the Masjid-i Shaykh Luṭfallāh on the east side of the Maydān-i Shāh. It was built between 1011/1602 and 1018/1609 by the architect Ustād Muḥammad Rizā Iṣfahānī. An enclosed

mosque, consisting of an entrance vestibule and domed chamber only, it is lavishly ornamented on both exterior and interior surfaces with tilework in which mosaic and *cuerda seca* techniques are equally apparent. Externally the two techniques are kept separate: *cuerda seca* is reserved for the entrance portal which is covered in panels of elaborate floral scroll in which blue and turquoise dominate, and mosaic for the dome worked in a bold design of interlacing arabesque foliage in turquoise, black and white against a plain brick ground (pl. 23). The interior of the dome chamber reveals a most imaginative and successful integration of mosaic and *cuerda seca* in a scheme which depended on emphasising features of architectural structure. These features consist of the chamber itself, the walls of which are shaped by four large corner squinches, each alternating with four blind arches aligned along the straight sides to form the first zone of transition. Above and between them is a band of faceted triangular pendentives forming the second zone of transition, which enabled the hemispherical dome mounted on a deep cylindrical drum to be constructed. The structure was first emphasied by a scaffolding of turquoise cable-moulded tile outlining each squinch and blind arch. Mosaic tile then repeated this outlining as deep bands of white *naskh* calligraphy on blue. This lay adjacent to the turquoise cable moulding, framing the *miḥrāb* niche and encircling the drum of the dome. Within this framework tile mosaic was used to cover the main areas of squinch and blind arch with both flamboyant bands of spiralling foliage and a repeating pattern of square motifs. These motifs were of rather contrived shapes in blue filled with white peony and lotus and the whole of this decoration were reserved against plain brick. The *cuerda seca* technique was used to line the *miḥrāb* niche and to form a continuous frieze lining the base of the walls. The design of this frieze was of elaborately spiralling foliage filled with large feathery peony and lotus leaves all set against a blue ground, punctuated at intervals by large white oval medallions filled with polychrome foliage. The faceted pendentives above the apexes of squinch and arch are faced with intricate scrolling foliage worked in tile mosaic while the dome is lined in a graduated series of foliate medallions.

The use of tilework to achieve brilliant surface pattern was taken further in Shāh ʿAbbās's great building, the Masjid-i Shāh, situated on the south side of the Maydān-i Shāh. Much more ambitious in scope and plan than the Masjid-i Shaykh Luṭfallāh, as the dome sanctuary was preceded by a large open court containing *īvāns* and an entrance portal, its building history was more prolonged and complex, and can be traced by means of dated inscriptions. The entrance was begun in 1020/1611 and finished in 1025/1616 well in advance of the main court. Inscriptions in the east *īvān* of the court and over the *miḥrāb* in the sanctuary record dates of 1028/1618, while the latest dates are 1040/1630 in the west *īvān* and 1077/1666 in a winter prayer gallery located on the north-west side of the mosque. Clearly therefore, despite Shāh ʿAbbās's insistence on his architects and craftsmen finishing the work before his death they failed to do so.

There is evolution and adaptation visible too in the tilework. The earliest part the main entrance is treated in a manner comparable with that of the contemporary Masjid-i Shaykh Luṭfallāh. The entrance arch, for example, is crisply outlined in turquoise cable moulding while a band of white *naskh* inscription on blue sharply defines the main portal frame. The tile mosaic lining the stalactite niche and the lower panels is essentially similar in design and colour balance to both the mosaic and *cuerda seca* of the Masjid-i Shaykh Luṭfallāh's entrance. Further use of mosaic appears on the minarets flanking the entrance which are sheathed in oblique coils of white geometric Kufic inscription against a turquoise background; this is repeated in the two minarets flanking the sanctuary.

Within the mosque's courtyard and *īvāns* the *cuerda seca* technique dominates on every surface, creating on overpowering effect of a vast expanse of blue and turquoise which varies in intensity according to conditions of light and weather (pl. 24). At close quarters this effect is seen to be created by a careful organisation of motifs into fluent and balanced patterns well adapted to the proportions and shape of the surface so decorated. The colour scheme also resolves itself into yellow, white, green and black against the blue and turquoise.

The treatment of design is vigorous and inventive concentrating on a three-plane lattice of foliage with large peonies, chrysanthemums, and lotus framed by shaggy curved leaves at the intersections (pl. 25), a scheme which invites obvious comparison with contemporary carpet designs (see Chapter 8). The sanctuary dome repeats the interlacing arabesque of the Masjid-i Shaykh Luṭfallāh but reserved against a glazed turquoise tile ground instead of matt brick. In two madraseh courts flanking the sanctuary and in the north-west prayer gallery, the latest parts to be added to the mosque, the *cuerda seca* tiles show an increased flamboyance of colour and coarseness of execution. The dominating colour is a bright chrome yellow on which are figured designs based on enormous peonies, exotically shaped medallions, and a curious spiked thistle possibly derived from the Chinese cloud scroll.

The last of the great Safavid buildings of Iṣfahān is the Madraseh-i Mādar-i Shāh built

24. Iṣfahān. Masjid-i Shāh, 1020–77/1611–66. Entrance to dome chamber showing extent of *cuerda seca* tilework.

25. Iṣfahān. Masjid-i Shāh, 1020–77/1611–66. Detail of *cuerda seca* tile panel in courtyard.



between 1118/1706 and 1126/1714 by Shāh Sulṭān Ḥusayn in the Chahār Bāgh Avenue. Superficially it resembles the Masjid-i Shāh in the generous proportions of its arcaded court pierced by massive *īvāns* and a domed sanctuary all embellished with tilework. A more discriminating examination, however, discloses that a considerable change has taken place in the tilework. The use of *cuerda seca* has much decreased and it is concentrated on the interior of the domed sanctuary where it continues the design formulae established in the Masjid-i Shāh of bold floral motifs against a predominantly blue ground. In contrast tile mosaic is much more abundant in the three remaining *īvāns* and in the arcades of the court where it is limited to a colour scheme of white, turquoise, black and yellow. The designs are geometrical, made up out of square or rectangular pieces of tile, and much simpler than the intricately curved shapes required for the rich floral mosaic of earlier times. The *īvāns* are lined with a range of patterns made up of repeating small-scale motifs or with shaped panels containing Kufic inscriptions. The entrance *īvān* has a design of particular interest: meticulously patterned oval and lozenge medallions set against plain yellow glazed brick and this arrangement of pattern and background is further developed later in the Qājār period. The courtyard arcades are tiled on their facades only with a repeating lozenge band leaving the niches themselves to be painted in plain stucco.

Limited evidence exists to show that tilework during the Safavid period was not the exclusive prerogative of major religious buildings. Two palaces demonstrate its use in secular buildings though on a more modest scale. The ʿĀlī Qapū palace on the west side of the Maydān-i Shāh begun by Shāh ʿAbbās in 1007/1598, has stair-raisers tiled in *cuerda seca* with flower patterns set against a bright yellow ground. However, the Hasht Bihisht, a small palace constructed on the plan of an open-sided octagonal kiosk in 1080/1669 by Shāh Sulaymān, illustrates more explicitly the use of *cuerda seca*. It featured in the external spandrels of each side and it demonstrates a much more extensive range of decorative motif than the religious buildings, including lively figural devices such as parrots (pl. 26), tigers, and people in combat. Panels of tiles also exist, unfortunately no longer *in situ* but in museum collections, decorated with elaborate figure compositions closely linked to contemporary paintings.[42]



26. Iṣfahān. Palace of Hasht Bihisht, 1080/1669. *Cuerda seca* tile detail.

Yet another parallel tradition in Safavid tilework is found in the Armenian churches at Julfā,[43] where it enriches the foliate design of the Muslim buildings with a world of lively animals and birds mingled with Christian iconography. *Cuerda seca* was used here, well shown in the Vank Cathedral where continuous wall-dados were installed in about 1075/1664. The colour scheme is more adventurous concentrating on a strong yellow or turquoise background against which ducks, phoenix and deer gambol among exuberant coils of foliage. Comparable tilework is also found in the churches of the Holy Mother of God (1021/1612), St Stephen (1022/1613), St Sargis (1017/1608) and the Bethlehem Church (1037/1627). More significant than these, however, are the first documented examples of human figures used in narrative composition rather than as isolated decorative motifs which occur in a panel dated 1029/1619 above the north door of St George's church (1019/1610) depicting the Adoration of the Magi. Further tiles of both technical and iconographical interest are found in a frieze behind the altar of the Vank Cathedral dated 1127/1715, which features winged angel figures framed in roses and egg plants against a white background (pl. 27); it introduces new colours of rose pink and purple which are to be increasingly used throughout the 12th and 13th/18th and 19th centuries.

The techniques of lustre and underglaze painting were rarely applied to tilework during the Safavid period, especially as *cuerda seca* and mosaic amply catered to all requirements in this area. Lustre painting, which is found on ceramics attributed to the 11th/17th century,



27. Iṣfahān. Vank Cathedral Julfā. Detail of *cuerda seca* frieze behind altar dated 1127/1715.

occurred in a rare example of tilework on a small group of early 10th-/16th-century building inscriptions and tombstones.[44] Surviving underglaze-painted tiles are also limited and baffling. The bath of Ganj ʿAlī Khān in Kirmān, which was completed in 1020/1611 has a frieze around the walls of its main room made up of square tiles in white composite paste painted in blue and red under a clear glaze. Kirmān had a reputation as a ceramic centre in the 11th/17th century especially for underglaze blue wares but no specific information has yet come to light concerning a contemporary tile industry. Even more speculative, since they cannot satisfactorily be allocated a provenance, are a group of so-called 'Kubachi' tiles painted in fluent technique with portraits of young men and women and other subjects under a crackled glaze; both style and subject matter resemble that of contemporary 10th–11th/16th–17th century miniature paintings.[45]

ZAND AND QĀJĀR TILEWORK

The Safavid period disintegrated in chaos following the Afghan invasion and siege of Iṣfahān in 1135/1722. A confused interregnum followed broken only by Nādir Shāh's reign (1148–60/1736–47) and the conditions of relative stability established by the rule of the Zand dynasty (1163–1209/1750–94) centred in Shīrāz. The most notable Zand ruler was Karīm Khān (1163–93/1750–79) who devoted his energies to the welfare of his subjects and to an ambitious building programme. Several of his buildings decorated with *cuerda seca* tiles have survived. This tilework must, however, be regarded with caution as Shīrāz suffered severe earthquake damage during the 13th/19th century, necessitating much subsequent restoration, so it is doubtful how much genuine Zand work has survived. The tiles decorating the spandrels of Karīm Khān's octagonal kiosk seem, when compared with known restored examples, to be original. They are remarkable in that they show a complete departure from the style of tilework current during Safavid times, although change was clearly apparent in the early 12th/18th century buildings of Iṣfahān. The Shīrāz tiles employ a different colour scheme in which white, yellow, grass-green and rose-pink dominate (pl. 31). Motifs also are independently spaced across a white background instead of being deployed in a complex repetitive scheme, and include figure subjects. A large panel over the east door of Karīm Khān's citadel boldly illustrates the combat of Rustam and the White Dīv but this is of value only in indicating a Zand taste for such narrative as the tiles are probably a modern restoration of the original panel.

Zand rule was short-lived and after a period of civil war Persia was united again under the Qājār dynasty (1201–1342/1783–1924), who reigned from their newly established capital of Tehran. The stability which their rule brought provided encouragement for renewed building activity and its associated crafts including tilework. It has been customary to dismiss this tilework as decadent and tasteless, regarding the Madraseh-i Mādar-i Shāh at Iṣfahān as the last worthy example of the art, and indeed all standard works on Persian art stop here. Yet tilework during the Qājār period shows great vitality combining established technical and design traditions with a lively new iconography. Its study offers many advantages as it provides a great wealth of buildings as primary source material in contrast to the limited sample available for earlier periods. As these buildings are not confined to monumental religious works but include secular constructions – palaces, private houses, city gates etc. – it is possible to build up a more balanced picture of type and function of tile decoration.[46]

The majority of buildings come from the two long reigns of Fatḥ ʿAlī Shāh (1212–50/1797–1839) and Nāṣir al-Dīn Shāh (1264–1313/1848–96). It is evident from a study of these monuments and from supporting evidence that there were several centres of tile production. Tehran was obviously one of the most important centres as its position as capital required the construction of numerous buildings and supplies of material necessary for tilemaking were conveniently situated outside the city walls. Iṣfahān, although no longer the principal centre, still continued to produce *cuerda seca* tiles in which the influences of Safavid design are discernible. Shīrāz also flourished, manufacturing a distinctive type of tile which can still be seen on the 13th/19th-century buildings there.

Fatḥ ʿAlī Shāh's building activity is seen in an impressive number of mosques and madrasehs decorated with mosaic and *cuerda seca* tile both in Tehran and the provinces. Mosaic developed the style already seen in the Madraseh-i Mādar-i Shāh, of geometrical designs worked in a colour scheme of yellow, turquoise, black and white, using motifs of stars, crosses, chevrons, checks, and Kufic inscription. *Cuerda seca* in contrast was used for more curving designs based on floral and foliate motifs. Blue was most frequently used for backgrounds reserving yellow, turquoise, grass-green, purple and a soft pink for the motifs.

Comparison of two mosques illustrates the use and development of these two types of

tilework. The Masjid-i Shāh at Qazvīn (pl. 29) is the earliest of Fatḥ ʿAlī Shāh's religious foundations and was built in 1222/1806 according to an inscription in the entrance. The other mosque, the Masjid-i Shāh (pl. 30) at Simnān was completed over twenty years later in 1243/1828 according to an inscription in the south *īvān*. Both mosques were built on the plan of an open court lined with arcades and with *īvāns* centred in either two or four sides. Polychrome tilework was used to emphasise the proportions of the mosque entrance. This was achieved at Qazvīn by imaginative combinations of tile mosaic organised in a series of ascending vertical panels worked in medallion and lattice patterns and *cuerda seca* confined to the spandrels of the entrance in a fluent Chinese-inspired design of blue peonies and foliage on white. Within the courtyard the extravagant Safavid practice of covering every surface with tilework was not followed. Instead tilework decoration aimed to emphasise the contrast between curved arches and vertical supports by generally being confined only to spandrels leaving the rest of the structure in plain brick. In both mosques the spandrels were therefore ornamented in *cuerda seca* tiles: in designs of peony sprays at Qazvīn and repeated floral lozenges at Simnān against alternating yellow and blue backgrounds. The most varied tilework, however, was concentrated in the *īvān* especially the south one which led into the domed sanctuary. In both mosques tile mosaic was used for a series of rectangular vertical panels flanking the *īvān*'s entrance and arranged in descending order of size. At Qazvīn such panels contain repeating patterns built up of units of lozenges or herringbone bands with Kufic inscriptions containing invocations to Allāh, Muḥammad, and ʿAlī among them, in a colour scheme where black and turquoise were used for outlines among the blocks of white and yellow. In the later mosque at Simnān however a change is noticeable as comparable vertical panels were worked in a bolder style where a single motif, usually a square or heart-shape containing Kufic inscriptions, was set against a plain ground. The colour has also changed as yellow, white and turquoise play equal parts in the design. Within the *īvān* tile mosaic was used to stress the facets of the vaults rather awkwardly at Qazvīn by filling shapes of lozenge, hexagon and star, and more elegantly at Simnān by outlining the vaults only to give an overall lace-like effect. *Cuerda seca* was also used at Simnān in the sanctuary *īvān* in the large panels worked in repeated rows of floral cone motifs – *būtehs* – in soft pinks, blues and green framed within alternating yellow and white medallions. This design has close parallels with textile design especially in the twill-woven wools of Kirmān and occurred for the first time in tilework in the buildings of Fatḥ ʿAlī Shāh.

Nāṣir al-Dīn Shāh's craftsmen clearly had an experienced and accomplished tradition of tilework at their disposal which was further elaborated in the buildings of his reign. His building activity in Tehran was associated with his drastic reorganisation of that city begun in 1284/1867. Both religious and secular buildings survive decorated with tilework showing innovations in technique and subject matter. Both mosaic and *cuerda seca* continued, the former worked in harsher colours in more sharply-designed patterns, the latter introducing colours such as navy-blue and orange-yellow worked in a shaded and hatched technique. Tilework of religious buildings is best demonstrated by considering the Masjid-i Sipahsālār built at Tehran between 1298/1880 and 1308/1890. It is a building of generous proportions, built on the open court plan with a proliferation of minarets – two flanking the entrance and four spaced along the facade of the south side. They dominate as much through their tilework as through their size; they are sheathed in *cuerda seca* bricks worked into a repeating design of lozenges filled with motifs, such as bowls of roses and irises and landscape scenes inspired by contemporary European postcard views all framed in yellow swagged foliage.

Within the court itself the traditional arrangement of Fatḥ ʿAlī Shāh's reign is followed as verticals and most of the arch recesses are in unglazed brick. *Cuerda seca* tiles ornament the spandrels and dado of each arch worked into a highly intricate surface of repeating floral motifs which include narcissi and daffodils. Tile mosaic was used to line the vaults of arches with rosette patterns meticulously worked in turquoise, yellow, black, white and red. The south *īvān*, as was customary, presents the most elaborate and varied tilework especially in the antechamber leading to the domed sanctuary. Here *cuerda seca* and mosaic techniques alternate. *Cuerda seca* tiles were worked into a series of oval medallions framed in exuberant scrollwork, each containing a still life of fruits and flowers – watermelons, pears, grapes, roses and irises (pl. 28). The glaze has been applied in varying degrees of thickness and carefully blended tones to give a highly enamelled finish and naturalistic effect. This is a new feature of Persian tilework which should more properly be compared with a similar style used in contemporary European ceramic factories than with anything in the indigenous tradition. Treatment of tile mosaic has a rather more local spirit as it is worked into shaped panels against plain brick; a balance of contrasting textures well established in Persian tilework.

The importance of the tilework on Nāṣir al-Dīn Shāh's secular buildings is that while it continued the abundant foliage and floral motif found in religious architecture, it added

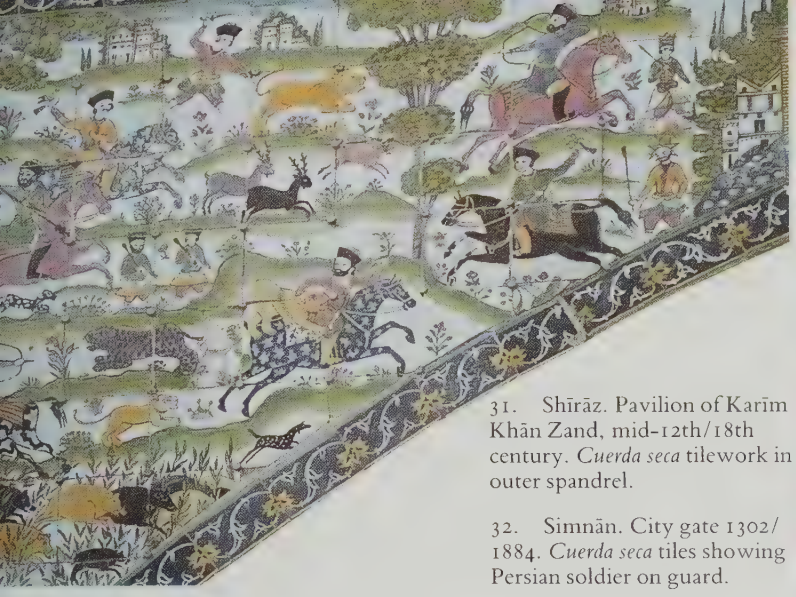
28. Tehran. Masjid-i Sipahsālār, 1298–1308/1880–90. Detail of 'enamelled' *cuerda seca* tilework within entrance to dome chamber.





29. Qazvīn. Masjid-i Shāh, 1222/1806. Arrangement of tilework on entrance to dome chamber.

30. Simnān. Masjid-i Shāh, 1243/1828. Arrangement of tilework on entrance to dome chamber.



31. Shīrāz. Pavilion of Karīm Khān Zand, mid-12th/18th century. *Cuerda seca* tilework in outer spandrel.



32. Simnān. City gate 1302/1884. *Cuerda seca* tiles showing Persian soldier on guard.

pictorial and narrative scenes. Pictorial design was already used in tilework during the 11th and 12th/17th and 18th centuries but as used in Nāṣir al-Dīn Shāh's buildings, the elements were composed into coherent scenes often representing episodes of contemporary life treated in a naturalistic manner.

Good examples of tilework may be seen in the Gulistān and Sulṭānatābād Palaces at Tehran. The Gulistān palace, a complex of buildings set within gardens functioning as both administrative centre and residence of the Qājārs, was so extensively rebuilt and extended by Nāṣir al-Dīn Shāh between 1284/1867 and 1310/1892 that it may well be regarded as his own creation. The palace of Sulṭānatābād was built in 1305/1888 as a summer retreat on the northern outskirts of Tehran. Much tilework was added to the external facade and the retaining walls of the Gulistān palace between 1284/1867 and 1300/1882.[47] Mosaic worked in geometrical patterns of turquoise, yellow, white and black, served to frame doors and windows, whereas *cuerda seca* appeared as a series of panels employing themes such as an animal combat motif, the Qājār emblem of the lion and the sun, hunting scenes etc., mingled with abundant foliage and roses. Some of the most interesting tiles, however, form a frieze lining the vestibule at the top of the stairs within the palace; dated inscriptions among them indicate that they were installed in 1304/1887. They are important because they are worked in the underglaze-painted technique, which had so far been rarely used in tilework.

The majority of pieces of good tile work are confined to Tehran where the career of one tilemaker ʿAlī Muḥammad Iṣfahānī,[48] who wrote the technical treatise already discussed, furnishes valuable information about the tile industry. From his surviving dated and signed tiles it is clear that he moved from Iṣfahān in 1302/1884 to work in the tilemakers' quarter near the old ʿAbd al-ʿAzīm gate in the south of Tehran. It is therefore probable that he and his contemporaries worked on the Gulistān and Sulṭānatābād palace tiles. These tiles depict many themes of Persian literature and legend, scenes copied from European illustrations, and episodes of contemporary Persian life. The latter categories are of particular interest as they are painted in a technique involving much shading and hatching in black and sepia showing the influence of photography. This is hardly surprising as Nāṣir al-Dīn Shāh was a keen photographer and built up a large collection of albums which supplied sources for tile design. In the Gulistān Palace there are tiles depicting Nāṣir al-Dīn Shāh reviewing his troops and listening to a piano recital (pl. 34) and views of buildings such as the Shams al-Imārat pavilion constructed in 1282/1865.

The most extensive use of underglaze-painted tiles is found in a frieze around the walls of one of the remaining reception halls at the Sulṭānatābād Palace. These are all alike with central stars in relief painted with figure scenes in fresh clear tints with much use of hatching, shading and perspective to create a naturalistic effect. The most interesting feature is the great repertoire of subject matter drawn from both Persian and European traditions. There is for example, a rare portrait of a tilemaker at work and an informal treatment of a Persian woman in outdoor costume (pl. 35). More obviously European themes include portraits of women in the costumes of the 1880s, Victorian children holding animals in their arms, and a man ballooning; such themes would have been directly inspired by the vast number of European illustrations which were imported into Persia in increasing quantities during the later 13th/19th century.

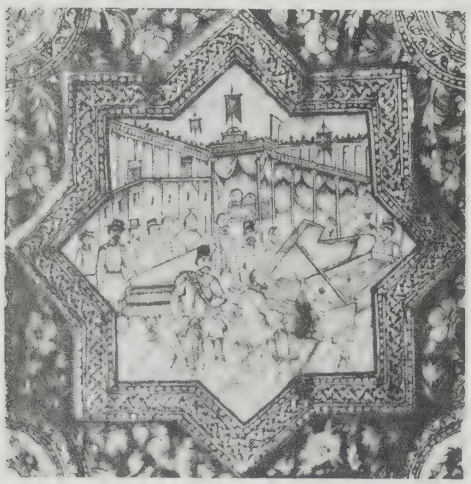
Secular buildings on a less grand scale than rulers' palaces showed a great variety of

33. Tehran. Darvāzeh-i Bāgh-i Millī 1340/19 . *Cuerda seca* tiles showing Persian Cossack on guard.





34. Tehran. Gulistān Palace. Underglaze painted tile from interior frieze, dated 1304/1887, showing Nāṣir al-Dīn Shāh listening to a piano recital.



35. Tehran. Sultānātābād Palace 1305/1888. Underglaze painted tile from interior frieze showing a Persian lady in outdoor costume.

subject matter in their tilework. In the Bāgh-i Iram at Shīrāz the central pediment of the east facade of the pavilion built in about 1292/1875 is decorated with a series of contemporary and traditional narrative scenes worked in bright *cuerda seca* tiles. Nāṣir al-Dīn Shāh on horseback, portrayed in a carefully detailed uniform against the landscape receding into the distance, is the principal subject, and is surrounded by characters of Persian literature such as Khusrau watching Shīrīn bathing and Zulaykhā and her women astonished at Yūsuf's beauty. The house of ʿAfīfābād built on the outskirts of Shīrāz in 1282/1865 has tilework inspired by earlier periods of Persian history as the main pediment is decorated with a large solemn investiture scene copied from one of the Sasanian rock reliefs at Naqsh-i Rustam. Pictorial tilework also featured on more public secular buildings such as city gates. One of the best preserved of the few surviving 13th/19th-century gates is that built by Nāṣir al-Dīn Shāh at Simnān in 1302/1884 and decorated with *cuerda seca* tiles mingling traditional and contemporary themes. The central pediment is filled with a bold pictorial composition of Rustam in combat with the White Dīv worked in bright flesh colours carefully detailing the texture of flesh and fabric. The contemporary world, however, is near at hand in the smart uniform of Persian soldiers either firing their cannons or standing to attention (pl. 32). They wear European style uniforms of white trousers and close-fitting jackets with epaulettes and bandoliers which were introduced to the Persian army as a result of the military reforms initiated by Muḥammad Shāh (1250–64/1834–48).

20TH-CENTURY TILEWORK

Muẓaffar al-Dīn Shāh (1313–24/1896–1907) continued his father's work in the Gulistān Palace by extending the underglaze-painted tile decoration of the frieze inside the vestibule at the top of the stairs leading up from the entrance; these tiles are dated 1316/1899 and all worked in the hatched monochrome technique influenced by contemporary photography. Their subject matter is derived from three sources: –

1. A series of Parthian kings each inscribed with the name of the dynasty and the ruler, treated in profile and set within a battered disc frame which indicates that coins were used as the source.
2. A series depicting Sasanian kings and later famous rulers, such as Shāh ʿAbbās I and Nadīr Shāh derived from the lithograph illustrations of late 13th/19th-century histories of Persia, such as the Nām-i Khusravān.
3. A series of landscape views and monuments including such varied items as medieval tomb towers and bridges of the Caspian region and the pyramids of Egypt. Here the source used must have been photographs from the royal albums.

Some of the most spectacular 14th/20th-century tile, however, belongs to the reign of the last Qājār Aḥmad Shāh (1327–42/1909–24). The Darvāzeh-i Bāgh-i Millī built in 1340/1921 when Rizā Shāh was Minister of War is the last tiled city gate in the Qājār tradition. Its *cuerda seca* tiles are arranged into large panels and bands of inscription and apart from such 13th/19th century motifs as the lion and sun emblems and a winged female figure they concentrate on a more military iconography. Soldiers guard the sides of the gate dressed in the uniform of Persian Cossacks with details of face and clothes meticulously shaded against a background of sky (pl. 33). Narrative scenes depicting soldiers and artillery among such contemporary equipment as machine guns and field detonators, are composed in a more integrated way than in the earlier gate at Simnān. Increased use of shading and blended washes of sombre colour give an impression of observed reality appropriate to the events recorded which probably took place in the Caucasus region where Persia was involved in World War I.

The evolution of Persian tilework throughout the centuries clearly reveals a tradition of unquenchable vitality with a constant habit of renewal. When it might justifiably be said, for instance, that the techniques of mosaic and *cuerda seca* had reached their apogee during the Timurid and Safavid periods respectively, new variations flourished in the Zand and Qājār periods. Tilework as a form of architectural decoration offers endless possibilities of style and theme, as is shown by contrasting the controlled mosaic patterns of the Saljūqs with the lively pictorial compositions of the Qājārs. Its iconography offers valuable comparative source material for the study of other forms of Persian art and decoration and visual evidence of the influences at work on Persian society. Its very adaptability may well be the reason for its survival as the dominant form of decoration as its appeal is so broadly based.

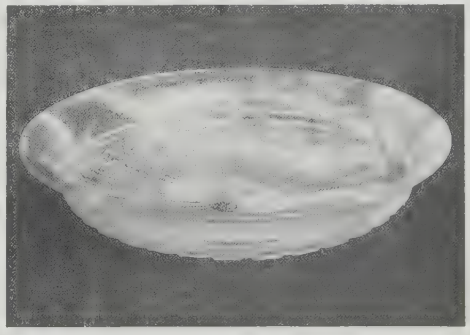
19 GLASS

INTRODUCTION

PERSIA APPEARS NEVER to have been a glassmaking country of seminal importance. Situated to the east of an area which from the earliest times has been a key centre in the history of glassmaking, Persia from time to time, by its political dominance, seems nevertheless to have attracted to itself either glassmakers or glasses of the highest order of interest. Although apparently not remarkable for indigenous talent in the special art of working glass hot, Persians seem at most times to have been adept in the skills of glass-cutting and engraving. Our knowledge of all these developments, however, is greatly hampered by the fact that hitherto no certain centres of glassmaking have been identified by archaeological means on Persian territory. Much has therefore to be conjectured from the nature of the glasses themselves found in Persia by comparing them with those found in neighbouring countries with a more firmly established history as producers of glass. Evidence for glassmaking in Islamic times at Sīrāf, a former port in the lower half of the Persian Gulf, has been adduced from his excavations there in the mid 1960s by Dr. David Whitehouse.[1]

A certain number of glass objects have been found in early graves in Luristān, mostly in the form of pale-green beads and bracelets with applied motifs in contrasting colours, in a style resembling the decorations on the earliest Mesopotamian and north Syrian vessel-glasses of the second millennium BC.[2] There seems little doubt that in this period Mesopotamia (and slightly later Egypt) was the main centre of glass-manufacture in the Near East, and there is no evidence that glass was being made in Persia. Beads and bracelets have always been the most easily traded items of the glassmaker's art. In the 8th century BC, when the Assyrian power was dominant in the Near East and was subjugating the territory of the Medes, a new type of glass was being made in the Mesopotamian workshops. This was a greenish translucent glass, often almost colourless, which was probably first cast or pressed in moulds and then finished by rotary grinding. The archetypal object is a greenish alabastron in the British Museum, with vertical lug-handles at the sides, bearing a cartouche recording the name of the King Sargon II (722–705 BC). The vase was found at the Assyrian capital Nimrud, where remains of glassworking have also been excavated. Of exactly comparable date, however, is an almost colourless bowl found at Gordion, in modern Turkey, but then in the territory of the ancient Phrygians. Whereas the 'Sargon vase' shows evident signs of having been drilled out internally by abrasive means, the open bowl needed no such treatment. A mesomphalic bowl evidently of metal-work inspiration, the Gordion bowl has a hollow central boss which rises from a flat disc on the upper surface. From this central feature radiate thirty-two 'petals' on either surface. After moulding, the bowl was evidently entirely worked over by rotary means to achieve a smooth finish. This type of vessel was to play a dominant role in Near Eastern glassmaking right into the Hellenistic period.[3] Apart from this 'petalled' shallow bowl, there was a deeper bowl, fluted in its lower part, concave in profile above, with a slightly flaring lip. A bowl of this kind, of virtually colourless glass, has been found in Cyrenaica in a tomb dated by its other contents to the 5th century BC.[4] At this time Cyrenaica formed part of the Achaemenian dominions. The fluting on bowls of this type echoes that often found on metalwork of the Achaemenian period, and a unique vase in the Corning Museum is exactly paralleled in shape by a silver example with characteristic ibex handles. The same parallelism may be noted in a variant of the petalled bowl, where projecting bosses on the outside alternate with the tips of the petals. An exact parallel is to be found in a silver bowl with an Aramaic inscription datable to about 300 BC and giving a Persian name. The boss decoration is found again on silver beakers, where it alternates with incised palmette-motifs above a body decorated with horizontal instead of vertical fluting.[5] A fragment of such a vessel in glass was found at Gordion in Hellenistic levels.[6]

1. Shallow dish of almost colourless glass, probably first mould-cast and then finished by wheel-cutting. Probably West Persian or Mesopotamian; 5th century BC, D. 17.5 cm. Corning Museum of Glass, Acc.No. 59.1.578.





2. Bowl of greenish glass, probably first mould-cast and then finished by wheel-cutting. Found in Persia (allegedly Amlash). Probably Parthian; 1st century BC–1st century AD, D. 11 cm. Victoria and Albert Museum, London, C.133–1963.



3. Bowl of almost colourless glass, cut on the wheel. Found in Persia. Sasanian; probably 6th–8th century AD, D. 10 cm. H. 8.5 cm. Victoria and Albert Museum, London, C.58–1963.



It may reasonably be assumed from what has been said that glass of these types (pl. 1) enjoyed a distribution throughout the Achaemenian dominions, wherever the centre or centres of production may have been. Vessels of these shapes may be seen on the reliefs at Persepolis (destroyed 311 BC) and, more to the point, actual fragments of bowls, dishes and beakers have been found there decorated with raised bosses, engraved 'petals', fluting and centrally placed rosettes in exactly the manner found on the vessels already described.[7] It will be recollected that when in Aristophanes' play *The Archarnians* (425 BC) Greek envoys returned from the Persian Court at Ecbatana they related how 'being guests we perforce drank the undiluted sweet wine from clear glass vessels and gold plate'.[8] No centres of production for these glasses have been identified on the Iranian Plateau, but the widespread distribution of these types of vessel, in both silver and glass, suggests a single cultural area, and it would be rash to maintain without reservation that one centre of manufacture in Mesopotamia was responsible for all the glass. The centripetal effect of a unified political power and an economically dominant capital city or cities should certainly not be underrated. This paradox constantly confronts us in our consideration of glass in Persia.

When the Parthian period is reached (mid-2nd century BC) a somewhat different situation arises. The first confrontation between the Parthian King Mithridates and Roman power in the person of Sulla occurred in 92 BC. By this time there had long been a flourishing glass-industry in the eastern Mediterranean, primarily probably along the littoral in Phoenicia, but certainly also in other areas such as Crete. The centre of gravity of this industry in the second half of the first century BC, however, was moving westwards into Italy and beyond, and the invention of glassblowing about 40 BC put a completely different complexion on the styles and forms of glass-manufacture. It seems likely that glassmaking centres eastward of Syria continued to make glass by the time-honoured techniques of casting and moulding, with wheel-abrasion as a finishing method.[9] At the same time, they could not but be affected by development to the west of them, and in half-way places such as Dura-Europos and Seleucia blown glasses are found which are basically of Syrian type but have nuances of their own.[10] In the same way, blown glasses with trailed decoration found far away to the east, at Begram in Afghanistan, have an idiom which is not entirely familiar in the West.[11] Unfortunately, some of the glasses found there are obvious imports from the Mediterranean world, so the picture is not clear-cut, and it is equally unfortunate that there are no actual archaeologically controlled finds on the Iranian Plateau itself. Yet, by reference backward to the Achaemenian period and forward to the Sasanian, it seems almost certain that the old tradition of moulded and cut glasses was unbroken in Parthian territory. A bowl such as that shown in pl. 2, therefore, which has a Persian provenance, although it is outwardly very similar to the cast bowls made in the eastern Mediterranean and further west at the very end of the Hellenistic period,[12] has slight divergences in colour, fabric and the handling of the internal cut line which suggest that it might in fact have been made in Mesopotamia or in a putative successor industry in western Persia inheriting the traditions of the Achaemenian period.

SASANIAN PERIOD

A great deal of glass of Sasanian date has been excavated (usually clandestinely) in Persia in the years since the Second World War, and with the aid of a few scientifically conducted excavations it is gradually becoming possible to build up some idea of the nature of Persian glass in this period. Much of this glass comes, if provenances are to be trusted, from north-western Persia, in the Gīlān region to the south-west of the Caspian Sea. The character of this glass on the whole conforms very well with that of comparable glasses known previously from sites in Mesopotamia (Kish, Ctesiphon, Seleucia, etc.), and it seems extremely probable that we are here dealing with a general glassmaking area covering north-western Persia and northern Iraq. No actual Sasanian glassmaking site appears, however, to have been discovered in either country.

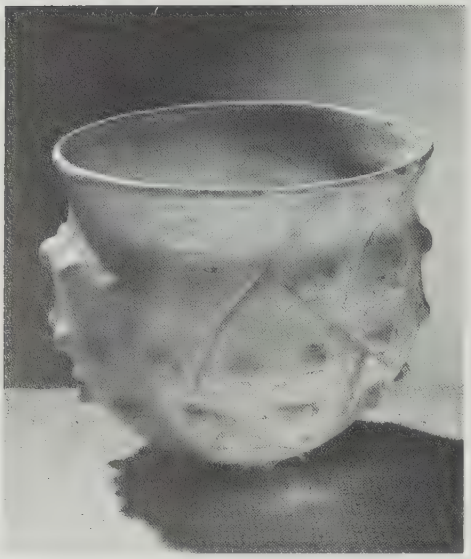
The most striking glasses of this period and area are those with wheel-cut decoration, a Near Eastern speciality from the earliest times,[13] and within this category the most common type is a hemispherical bowl covered all over with circular facets, which occasionally overlap to give a honeycomb effect of intersecting hexagons (pl. 3). Bowls of this kind provide the most complete distribution pattern available to us in any attempt to assess the importance of Sasanian glass both within and outside its district of origin. Bowls with facet-cut decoration were commonplace in the lands of the Roman Empire, and were often exported to relatively barbarous areas outside its own boundaries.[14] Roman facet-cutting, however, was usually relatively shallow, and it was perhaps the depth and powerful effect of the Sasanian cutting which gave these bowls their wider appeal. Examples occur already at



5. Ewer, blue glass faceted on the wheel. Sasanian; probably 3rd–4th century AD, H. 14.6 cm. The Corning Museum of Glass, Acc.No.65.1.23.

Dura-Europos, on the frontiers of Mesopotamia and Syria, before the middle of the 3rd century.[15] At the other extreme of time and place, two bowls are known in Japan, one in a burial dated to AD 535, the other forming part of the Shōsōin Treasure at Nara, the contents of which were dedicated in AD 756, although the bowl may already have been old by this date.[16] Examples of the 6th century were found at Kish,[17] in southern Mesopotamia, and 6th–7th-century pieces from the Sasanian capital city of Ctesiphon, on the Tigris below Baghdad.[18] Comparable bowls have been found in the Soviet Union, and it is possible that there was a centre or centres of production there which ran in parallel harness with the Persian-Mesopotamian glass-industry. Closely related to the hemispherical bowls is a type of piriform vase the base of which exactly resembles one of these bowls in shape and decoration; and a tapering amphora-shaped rhyton with a pair of twisted side-handles at the neck.[19] The same heavy faceting also occurs on a type of tall pointed beaker which is a version of a form favoured in Eastern Europe and Scandinavia in the 5th century.[20] There is also a goblet on a foot (pl. 4) which recurs with a cut decoration of arcading and square faceting found again on the tall tapering beakers, a one-handled ewer (pl. 5), a rare hemispherical bowl, and a number of shallow bowls with spreading rim in different collections.[21] This form in Europe is mainly late-4th century, and in the Near East is likely to be of the 5th.

4. (*facing page*) Footed bowl, probably almost colourless glass with heavy buff surface-weathering, decorated with applied threads nipped together sideways with tongs. Found in Persia (allegedly Amlash). Sasanian; probably 5th–6th century AD, H. 10.5 cm. D. 11.5 cm. Victoria and Albert Museum, London, C.47–1969.



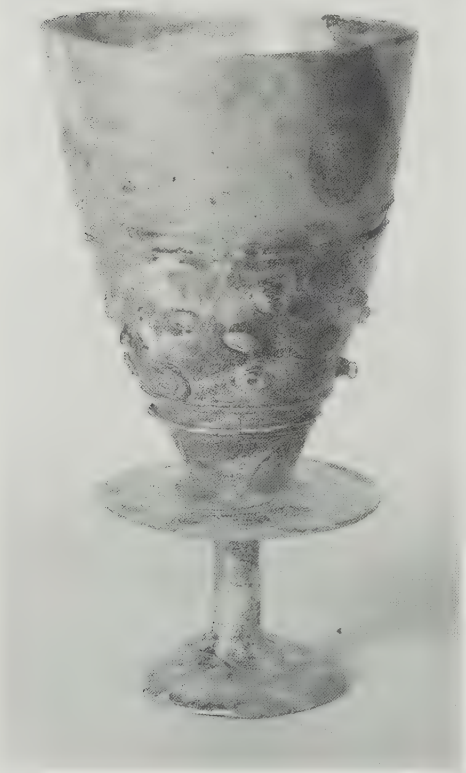
6. Bowl of greeish-colourless glass, with furnace-worked relief decoration. Found in Persia. Sasanian; probably 4th–5th century AD, D.9.5 cm. H.8 cm. Victoria and Albert Museum, London. C.26–1968.

Running parallel with the faceted style of decoration, essentially executed in an *intaglio* technique, is a relief-style which may well develop from it. In its simplest form, this consists of a series of discs running in parallel series round the body of a bowl (or more rarely a bottle), left in appreciable relief by the grinding away of the ground on which they stand, their outer surfaces ground hollow as if they were facets in the air. The fragments of such a bowl, examples of which have been found in some numbers in the Gīlān region, were found in Japan on a late Tumulus-period site at Okinoshima, giving a date in the 6th–7th centuries, although the bowl may have been already old when buried. More elaborate varieties of relief decoration consist of projecting bosses set in the middle of circular facets, and concave bosses of the sort already described set in even larger facets; these may alternate with each other and with simple small circular facets.[22] The monumental effect of these glasses can be out of all proportion to their actual size. A good example of this family of glasses was found as far south as Susa.[23]

The glass of these cut pieces is usually either greenish or virtually colourless, and normally suffers from a whitish or buffish weathering which coats the glass in a smooth skin and sometimes consumes almost the whole substance of the glass, greatly diminishing its weight. The greenish metal is probably the earlier in date.

Clearly akin to the cut glasses are those with furnace-worked decoration, usually in a much thinner glass, but otherwise sharing the characteristics of those already described. One example, found in a controlled excavation at Ḥasān-i maḥāleh, in the Daylamān district of the western Alborz, was a bell-shaped bowl decorated with roughly rectangular 'prunts' and vertical triangular 'fins' in horizontal rows, all these decorative features having been nipped out of the substance of the glass with the worker's tongs: the bowl stands on a circle of ten 'toes' similarly worked.[24] Numerous variants of this type exist (pl. 6), one of them found in a 3rd–4th century context at Tell Mahuz, near Kirkuk in northern Iraq,[25] others at Ctesiphon. They well exemplify the susceptibility of Sasanian taste to the styles of Roman glassmaking, for this is a common type in Syria and further west, where it flourished in the 3rd–4th centuries. There can be little doubt, however, that the Near Eastern examples were made in the area and not imported. The same techniques of decoration were also applied to shapes which were more specifically Mesopotamian-Persian, notably a low flat-based beaker which appears at Tell Mahuz with nipped-out decoration, but elsewhere with mould-blown ribbing of an idiosyncratic kind, bounded above by a raised ridge,[26] and sometimes 'nipped diamond-waies' in a very characteristic design without parallel elsewhere. The fragment of a flask with this decoration, dating from the 6th century, was found at Kish.[27]

7. Goblet, almost colourless glass with applied thread and 'prunt' decoration, some in green. Found in Persia. Persian; 3th-4th/9th–10th century or later. H.12.5 cm. D.7.5 cm. Victoria and Albert Museum, London, C.71–1967.



MEDIEVAL PERIOD

With the advent of Islam after the battle of Nihāvand in 21/642, no sudden change was to be expected in glass styles and none seems in fact to have occurred. Nevertheless, if we look at the glasses of Persian origin which show analogies with those found at Sāmarrā in Iraq (founded 221/836 and abandoned as capital 276/892), a new order of form may be observed, in small flasks with cylindrical or rectangular bodies and short cylindrical or slightly everted necks. Others have depressed globular bodies with proportionately longer, slightly swelling cylindrical necks and there are larger bottles with long necks, often with a flaring or disc-like lip, low bowls and cups with vertical or slightly sloping sides, and larger cylindrical bowls. Tumblers with slightly everted straight sides and ewers with angular handles and tapering necks terminating above in a flaring lip with a pouring spout have also been found.[28] Some of these shapes, such as the small flasks with swelling necks, are apparently found only in plain glass, while others are to be found decorated in various ways, but notably in the wheel-cut technique which the glassworkers of Islamic Persia seem to have inherited from their Sasanian predecessors, and which will be described below. Many glasses were of a purely utilitarian character, sometimes of unpurified green glass, such as a great plain demijohn, presumably for holding wine, found in the excavations of Nīshāpūr.[29] There were spittoons with globular bodies and wide spreading rims, alembic-heads, cupping glasses (?), squat thick cylindrical vessels with a thickened flat top and central orifice, with one or three handles and probably used as lamps, and tiny flasks in many shapes, presumably cheap containers for perfumes.[30] The range of shapes naturally changed and grew as the medieval period progressed, and some currents in the ʿAbbasid period died out under the Saljūq domination.

These changes may often be detected in the parallel developments of pottery and metalwork forms. Among these apparently later shapes may be noted the flask with depressed or shouldered globular body and long tapering neck with spreading lip, the neck often decorated

with applied threads; footed bowls much like those made in Kāshān pottery; stemmed goblets which anticipate European forms of the 7th–8th/13th–14th centuries (pl. 7); a tankard with cylindrical neck, low body standing on a foot, and a looped handle with thumb-rest (pl. 9).[31] Nearly all are decorated on the body with mould-blown patterns of various kinds. Indeed, mould-blowing seems a relatively rare phenomenon in the earlier glasses, except perhaps for simple ribbing or diaper designs on some of the bowls and flasks. It seems, however, to become common on 6th/12th-century glasses of the later shapes described above (pl. 8), where the designs may be of considerable elaboration. It may well be that mould-blowing was a cheap substitute for the wheel-engraving and cutting which had dominated the earlier period (see below). The more elaborate designs, which would be spoiled by further working, were probably blown in two-part moulds, examples of which have been identified in Iraq. The simpler designs, often enhanced in their light-refracting quality by subsequent distension, could be imparted by dip-moulds.[32] Virtually peculiar to the Islamic glassmaker is the technique of impressing designs by means of a tong-like instrument which gripped both sides of the glass, normally on open shapes like bowls and beakers. More frequent in Egypt, they are also found on Persian sites.[33] A complicated version of this style of decoration involved the joining together of a lower and an upper half (usually of blue or purple and colourless metal respectively) decorated in this way. Rare in Persian finds, and much commoner in Syria,[34] these may perhaps be considered to be imports into Persia.

Of comparable effect to this manner of decoration is the technique of impressing relief-motifs on applied pads of glass decorating the wall of a vessel. Often these show winged horses or pheasant-like birds of distinctly Sasanian appearance, and their generally primitive character suggests an early date. The occurrence of Arabic inscriptions, however, confirms a date within the Islamic period for the pieces concerned.[35] Although no examples of this type are certainly known to come from Persian territory the nature of the decorative motifs suggests a Persian origin. The technique is certainly found again on later vessels allegedly found at Rayy and Sāveh.[36] Last, but certainly not least, of the techniques of decoration practised at the furnace while the glass was still hot, is the use of spirals and zigzags of glass thread, sometimes self-coloured, sometimes in contrasting colours.[37] Occasionally these seem to imitate the appearance of motifs executed in relief engraving.

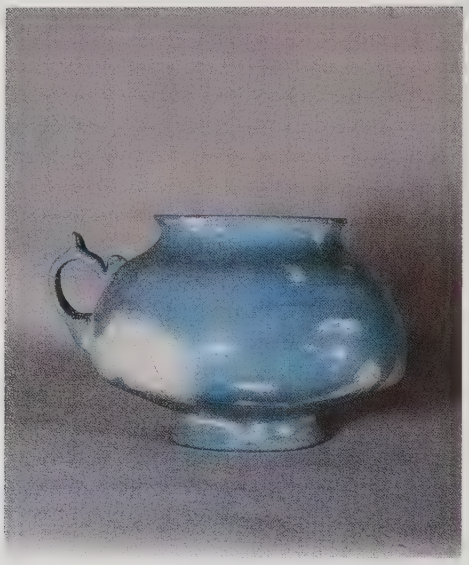
Far more important artistically than any of the types of decoration mentioned so far was that of wheel-engraving. As has already been made clear, glass-cutting by abrasion has a long history in Persia. It has not, however, been stressed hitherto that the Sasanian engravers not only cut abstract formal motifs such as *intaglio* facets and raised bosses, but figural motifs of considerable sophistication. These were normally executed on the far more intractable material of rock-crystal, the most famous work in this genre being the 'Cup of Khosroes' in the Bibliothèque Nationale in Paris.[38] This has at its centre a circular crystal plaque showing a Sasanian king, possibly Khusrau I, enthroned (see pl. 32, Chapter 5). There is also an oval cup with a rendering in *intaglio* of a dancing-girl closely resembling those found on Sasanian silver jugs, and a shallow dish engraved with a Sasanian monarch slaying a lion.[39] This calls to mind the thick glass bowl said to have belonged in the Treasury of the Umayyad Caliph Marwan II (126–32/744–50). This was described as being of 'Pharaonic' (i.e. ancient) glass, and representing an archer aiming at a lion.[40] It should also be borne in mind that one of the glass objects in the 2nd/8th-century Shōsōin Treasure at Nara (see above, p. 298) is an emerald-green dish of a lobed oblong form found in Sasanian silver. This is crudely engraved in *intaglio* with two small figures of (?) hares such as are found again later in glass almost certainly of Persian origin.[41]

The engraved glass of the early ʿAbbasid period falls into several technical categories which are not always differentiated. First, there is *intaglio* engraving, in the technical tradition to which reference has already been made. In this, essentially linear designs are worked up from thinner and thicker straight and curved cuts of the wheel. The technique had probably evolved from the art of the seal-cutter, and is to be seen on seal-stones of Islamic as well as of earlier date. In this technique very effective designs could be carried out, often by the ancillary use of hatching and cross-hatching to enliven internal areas of the design. It was never used, however, as it had been in the Roman world and was to be much later in Europe, for the building up of a three-dimensional effect by the juxtaposition of deeper and shallower facets of varying size and shape made by changing from one size or profile of wheel to another. The technique of the seal-engraver and lapidary, which we have no reason to suppose changed much over the centuries, was described by Chardin in the 11th/17th century:

> The Persian lapidaries make their wheels of two parts of emery to one of lac ('laque') . . . They rotate these wheels hafted on to a circular mandrel, with a bow which they hold in



8. Ewer, emerald-green glass with mould-blown decoration. Found at Rayy. Persian; 6th–7th/12th–13th century. H. 17 cm. Nationalmuseum, Stockholm.



9. Cup, opaque-turquoise glass. Persian; 6th–7th/12th–13th century, H.7.5 cm. Victoria and Albert Museum, London, Buckley Collection, C.134–1936.

> one hand, while with the other they hold the stone against the wheel . . . when they want to polish the stone, they put in place of this wheel another made of red willow, on which they throw putty or tripoli. The seal-engravers employ the bow and a very small copper wheel with emery. They use Persian and Indian emery . . .

Similar equipment has been in use in the Near East until modern times, and since its origins can also be traced deep into prehistory, it is reasonable to assume that it has continued essentially unchanged for several millennia.[42] Even supposing that an apprentice was employed to work the bow, which was activated by a cord looped round the spindle, it is incredible what heights of skill were attained by the glass-engravers of the ʿAbbasid period.

Intaglio engraving was probably the cheapest and easiest form of engraved decoration. Examples were found at Sāmarrā (probably 3rd/9th century) and in apparently 4th/10th-century contexts at Nīshāpūr. That fine colourless glass was familiar at this period in Khurāsān is indicated by a verse of the poet Daqīqī, of Ṭūs, some sixty miles away from Nīshāpūr:

> Water and ice, behold, within a glass
> How candle-bright all three do shine; but see,
> The twain will fuse, yet one a frozen mass
> Remains. One hue, one luster have these three.[43]

Two of the Nīshāpūr finds were tumblers, and a third of this shape in Stockholm came from Rayy or Sāveh, while the base of a comparable beaker in the same collection and with the same provenance is superbly engraved with a frieze of (?) lions, their necks rendered in herring-bone hatching, and their bodies with cross-hatching.[44] A bottle from Persia in the Buckley collection at the Victoria and Albert Museum is similarly engraved with a bird, accompanied by much herring-bone engraving and cross-hatching. The shape of this bottle is widespread in the Islamic world at this period, and occurs at Sāmarrā and Nīshāpūr[45] as well as at Sabra-Manṣūriya, not far from Qayrawān in North Africa, a city founded in 336/947 and destroyed in the 5th/11th century. This example was engraved with two quadrupeds much in the style of the Stockholm beaker.[46] In one instance, a tumbler in Stockholm coming from Rayy or Sāveh is engraved through a patch of green 'flashing', a feature also found in the relief-engraved glasses (see below). A cylindrical cup, rather crudely engraved with a bird and a 'tree of life' design was found in the 3rd/9th-century trading-centre of Birka, in Sweden, and thus provides a date if not proof of origin.[47] A shallow bowl engraved in the same technique with a stylised design, perhaps of a formalised grapevine, however, was found at Fusṭāṭ, the ancient Egyptian capital, in a context suggesting a date in the late 2nd–3rd/8th–9th century.[48] On balance, it seems that this mode of glass-decoration was widespread throughout the Islamic world of the 3rd–4th/9th–10th centuries, but there seems little reason to suppose that the examples found in Persian soil were not also produced there.

Far more complicated, and involving much more work, were the relief-engraved glasses. The best of these are among the masterpieces of Persian glass. The designs are rendered by grinding away a large part of the surface of the glass, to leave the patterned areas standing in relief. These areas were then themselves largely cut back to leave each element of the design outlined with a ridge which was then cross-notched, while certain parts were simply hatched to give an emphatic texture to, e.g., the mane of an animal (pl. 10). Some of the finest of these pieces were produced by carving through a coloured 'flashed' layer (pl. 11). By far the greatest number of relief-engraved pieces have apparently come from Persian soil, but some were found at Sāmarrā,[49] and others have come from Egypt. Notable among these last is a ewer from Fusṭāṭ, excavated from an undisturbed layer of probably 3rd/9th-century date, where it was accompanied by a shallow relief-engraved bowl with a frieze of birds within roundels closely resembling a bowl of Persian provenance in the Buckley collection.[50] A number of ewers are known which are decorated in this same technique, and their shape and sometimes their decoration, closely resemble those of the ewers in rock-crystal which are usually attributed to Fatimid Egypt and the late 4th/10th to early 5th/11th century, on the basis of two surviving inscribed and dated crystals.[51] That there were enormous numbers of rock-crystal objects in Cairo in this period is known from the account of the plundering of the Fatimid treasures in 454/1062. The sources mention some 18,000 objects of rock-crystal and crystal-glass.[52] In recent years, however, a number of rock-crystal objects have been excavated in Persia, among them a goblet of a shape which has also been found there in relief-cut crystal-glass.[53] There is no reason to suppose that hardstones were not cut in Persia at this period, and it is fair to assume that since there was a long history of this kind of work both before and after the medieval period, there may well have been a continuous production of these wares. The stylistic links between the relief-





10. (*left*) Bottle, clear colourless glass, relief-engraved on the wheel. Probably Persian; 3rd–4th/9th–10th century, H. 16.7 cm. Corning Museum of Glass, Acc.No.71.1.7.

11. Ewer, clear colourless glass, reliefengraved on the wheel through a green overlay. Acquired in Persia. Probably Persian; 4th/10th century, H. 15.5 cm. English private collection.



12. Bowl, almost colourless glass, relief-cut on the wheel. Found in Persia. Probably Persian; 3th–4th/9th–10th century, H.8.3 cm. D.12 cm. Victoria and Albert Museum, London. C.62–1971.

13. Bottle, greenish glass relief-cut on the wheel. From Iran (allegedly from Bujnurd). Probably Persian; 3th–4th/9th–10th century. H.14.8 cm. Corning Museum of Glass, Acc.No.73.1.30.



engraved glass (especially the ewers) and the rock-crystals have suggested that some of the glasses may be of as late a date as the 5th/11th century. The spacious style of the two dated rock-crystal ewers, however, contrasts somewhat with the usually rather crowded compositions on the relief-engraved glasses, with their small-scale and often numerous animals on a single piece. Nor should it be supposed that rock-crystal engraving in Egypt sprang into existence ready-made in the Fatimid period. There must have been a production in the preceding Tulunid period in Egypt, and efforts have been made to isolate some of these pieces, and to produce a relative chronology of the relief-cut glasses.[54] Further progress in this direction must probably await the discovery of relevant pieces in datable archaeological contexts or with datable inscriptions.

Somewhat apart from the two styles of wheel-engraving described, is a third which partakes of the character of both (pl. 12). Here, by use of oblique cuts, the design is left in relief without being bounded by a raised outline. In many ways this is a subtler technique, with ambiguities of surface relief which beguile the eye. This style has distinct affinities with the so-called second or 'bevelled' style of stucco-, wood- and stonecarving at Sāmarrā, datable to the 3rd/9th century.[55] The famous turquoise glass bowl now in the Treasury of St Mark's, Venice, could be considered as a bridge between this style and the relief-cut style with raised outlines. This has engraved on the base the word 'Khurāsān', an area famous for its natural turquoise, with the misleading implication that the bowl itself was of the more precious material.[56] Here the running animals are in relief, but the countersunk eye (unmistakably reminiscent of the circular boss-cutting on Sasanian glasses) and the bevelled cut of the leg-joints and of the curling tail distinguish this glass from those of the relief-cut group already described. It is probably sensible, however, in the present state of knowledge, not to attempt any sharp divisions into schools or workshops.

Throughout this period the old manner of cutting glass into circular facets, relief-bosses and flat planes, inherited from the Sasanian period, persisted, mainly on flasks (pl. 13) and jars,[57] and particularly on an innumerable series of small scent-bottles. These are usually square in section, cut into four sharp tapering points at the base, and in consequence often referred to as 'molar tooth flasks'.[58] The permutations of this theme were seemingly inexhaustible.

Far simpler as a means of incising the surface of a glass was the use of a hardstone-point, a technique already familiar in the Roman era. Most of the examples of this genre – often cylindrical beakers with rather crude scratching – seem to have come from Egypt,[59] but a wonderful blue dish, unfortunately incomplete, was excavated at Nīshāpūr in an early 3rd/9th-century context and shows a degree of elaboration and sophistication which is unrivalled among the Egyptian fragments (pl. 14). Its design echoes the motifs of Mesopotamian lustre ware of the 3rd/9th century, but also has strong affinities with the wall-paintings found in Nīshāpūr itself.[60] There seems little reason to think that it is of other than Persian origin.

The earliest use of a silver-compound to produce a yellow 'stain' or 'lustre' on the surface of a glass (a technique later utilised by the window-glass painters of medieval Europe) is usually associated with Egypt.[61] This association has been greatly strengthened by the recent discovery at Fusṭaṭ of a glass bowl decorated in this way and furnished with an inscription which dates it to the second half of the 2nd/8th century.[62] However, a fragment of glass of this type has been excavated at Nīshāpūr too,[63] and in recent times a number of lustred glasses are alleged to have come from the same vicinity. Since a further glass of this category has come to light with an inscription recording its manufacture in Damascus,[64] the seeming monopoly of Egypt in this field now comes in question, and some of the Persian-found examples may also have been made in that country (pl. 15).

With the breakdown of the central power of the ʿAbbasid caliphate and its gradual subordination to the Turks who had at first been their hired bodyguards, Persia in the 4th/10th and 5th/11th centuries went through troubled times under the shifting domination of various local dynasties, notably the Samanids in the eastern territories and the Buyids in the south and in Mesopotamia. Matters cannot have been improved by the gradual infiltration westwards of the Saljūq Turks, culminating in the capture of Baghdad itself, capital of the caliphate, by Tughril Beg in 447/1055. In the second half of the 5th/11th and the first half of the 6th/12th centuries Persia seems again to have enjoyed a period of prosperity and cultural activity, but it is far from certain how this is reflected in the manufacture or use of glass. It seems likely that mould-blown glasses (see above, p. 000) were its main decorative manifestation, and pottery and metalwork perhaps dominated glass in this period. With the decline of Saljūq power after 493/1100, the proliferation of petty dynasties and the encroachments of the Khwārazm-shāhs, times must again have been unpropitious for the arts. The final cataclysm came with the incursions of the Mongols under Chingiz Khān, beginning in 616/1219, and culminating in the capture of Baghdad and the murder of the

last caliph by Chingiz's grandson, Hülegü. The loss of human life and property was incalculable, and this was no time for the flournishing of a glass-industry in Persia. In glass history this was the period of the rise and predominance of the gilt and enamelled glass made mainly in the Syrian centres of Damascus, Aleppo and possibly also Raqqa. A certain number of fragments of gilt and enamelled glass have been found in Persia and it has even been surmised that some may have been made in Persia itself. This is based mainly on stylistic arguments which are perhaps rather weak when pitted against the overwhelming evidence for the predominance of Syria in this type of glass-decoration.[65] The poet Ḥāfiẓ mentions 'people who indulge in China's wine cups and Aleppo's bottles'.



14. Fragmentary dish, blue glass engraved with a hardstone-point. From Teppeh Madraseh, Nīshāpūr. Persian; early 3th/9th century. D.28 cm. Metropolitan Museum of Art, New York.

SAFAVID PERIOD AND LATER

When in 802/1400 Aleppo and Damascus in their turn were devastated by Tīmūr, their glass-industries too went into inexorable decline, many of the craftsmen being deported to Samarqand by the conqueror, to work in a new glass-industry there.[66] Nothing is really known of what they made in Samarqand, and the general decline of Near Eastern glass-making in the 9th/15th century is underlined by the fact that European, primarily Venetian, glasses began their first serious penetration of the Levantine markets at this time.[67] All the available evidence relates to Turkey, Egypt and Syria, and no finds of European glasses of this period appear to have been made in Persia itself. The transit trade at this time seems to have been in the hands of the Armenians, who imported goods from Europe by way of Smyrna, Aleppo and Erzerum to Tabrīz, the nexus of their activities, and thence into the rest of Persia. The trade in silks, going in the other direction, followed the same route. In 905/1499 Tabrīz was captured by Shāh Ismāʿīl, first of the Safavid Kings and in 920/1514 it was retaken by the Turks under Selīm the Grim. These vicissitudes must have caused considerable disruption in the East-West trade, and unsettled conditions continued under Shāh Ṭahmāsp (930–84/1524–76). In 1011/1602 Shāh ʿAbbās the Great captured Tabrīz and the Armenian capital of Julfā, and in 1013/1604 evacuated the Armenians from these two cities and re-established them in different parts of his dominions, notably in New Julfā, a suburb of his new capital at Iṣfahān. It is small wonder that few of the European glasses imported into the Levant actually reached Persia itself.[68] Nevertheless, the records of the Venetian consul, Alessandro Malipiero, in 1004/1596 reveal that glass, mirrors and beads were articles of export to Persia. In 1022/1613 Shāh ʿAbbās himself obtained 'worked glasses, beautiful and well-made, and for the most part gilt ... large crystal mirrors ... mirrors of middling and small size ...'[69] through his agents in Venice. Looking-glasses indeed were a prime commodity, and a European visitor to Iṣfahān in 1046/1637 recorded



16. Four glasses, two colourless (*a* and *d*), two blue (*b* and *c*), three mould-blown (*a*, *b*, *d*). From Persia. Persian; probably late 12th–13th/18th–19th century, H. of *a* 42 cm. Victoria and Albert Museum, London, *a*.695–1884; *b*.584–1874; *c*.921–1889; *d*.923–1889.

15. Cup, greenish-colourless glass painted in brown lustre. Found in Persia. Probably Persian; 3th–4th/9th–10th century, H.6.5 cm. D.7 cm. Victoria and Albert Museum, London, C.24–1965.





'a very beautiful room ... all lined above with numerous portraits or pictures of women ... and below them was nothing but mirrors, to the number of more than two hundred, large as well as small; so that ... one saw oneself reflected on all sides'.[70] It is clear also that European glass vessels were in great demand during the 11th/17th century to supply bases for *qalyāns*.[71] What of glassmaking in Persia itself?

Chardin, recording experiences in Persia in 1077–81/1666–70, and referring to crafts in which the Persians were relatively unsuccessful, writes:

> There are glasshouses all over Persia; but the glass is for the most part flawed ... and greyish in colour ... The glass of Shiraz is the finest in the country; that of Ispahan, on the contrary, the worst because it is only glass re-melted.... For the rest, the art of making glass was introduced into Persia less than eighty years ago. An Italian, poor and avaricious, taught it at Shiraz for fifty crowns ...[72]

The traveller Tavernier, first in Iṣfahān in 1042/1633, records three or four glasshouses in Shīrāz; and Thomas Herbert in 1036/1627 refers to 'plenty of Shyraz wines brought in long-necked glasses', these last being presumably locally made, for it is evident from the 11th/17th-century sources that much of the Shīrāz glass was made for the bottling of the local wines and pickles.[73] There is a certain consensus among the writers, however, that the Shīrāz glass could be clear and colourless, and a certain number of surviving glasses show this characteristic, notably some long-necked bottles and swan-necked sprinklers with mould-blown bodies, mounted on a foot with a knopped stem above it (pl. 16, a and d). Sprinklers of this shape can be seen amongst vessels being used for a festive occasion, which is represented on a lacquer box dated 1204/1790,[74] and the long-necked bottle of pl. 18 almost certainly intended as a *qalyān*-base, has both the knopped stem and a decoration of lamp-made flowers fixed to the base inside. This feature (probably copied from Venetian prototypes) is referred to by E.S. Waring in 1807; 'They have here a glass-house and a foundery, both worth seeing. The bottoms which they blow, of glass, for the *Kuleeans*, have a curious appearance to a stranger; they are ornamented in the inside with representations of trees, flowers, etc ... When the glass is just blown, they fix them in the bottom with small pincers....'[75] These items of evidence, taken together, give some insight into the nature of the glass made about 1214/1800. Far more difficult to date are the coloured glasses made in these and other forms (but without the stemmed foot). A. Nesbitt, compiling the *Catalogue* of the glass vessels in the South Kensington Museum (now the Victoria and Albert Museum) in 1878, wrote: 'Several specimens of vessels have been lately added to the collection which are stated on good authority to be exactly similar to those made daily in Persia'. Some of these pieces can still be identified (pls. 16, b and c; 17 and 18). It seems far more likely that glasses surviving in some quantity above-ground should be of 13th/19th-century date rather than survivors from the preceding turbulent epoch. Some of the long-necked flat-bodied bottles in green glass, however, often with a twist of glass-thread on the neck, may for one reason or another be attributed to the 12th/18th century and are probably bottles made to serve the Shīrāz wine-trade. They were apparently, however, still being made at Qum as late as the first decade of the 14th/20th century.[76]



18. *Qalyān*-base, clear colourless glass with enclosure of flowers in coloured opaque glass. From Persia. Persian; probably late 12th–13th/18th–early 19th century, H. 38 cm. Victoria and Albert Museum, London, 907–1889.

17. Sprinkler, smoky glass with twisted mould-blown ribbing. From Iran. Persian; probably late 12th–13th/18th–early 19th century, H. 33 cm. Victoria and Albert Museum, London, 99–1877.

20 THE ART OF CALLIGRAPHY

حسن خط چشم را کند روشن قبح خط دیده را کند گلخن

A beautiful writing renders the eye clear;
The ugliness of writing turns the eye into a bath stove.

THUS SAYS SULṬĀN ʿALĪ Mashhadī (d.925/1519), one of the most famous calligraphers of Persia.[1] Calligraphy is, indeed, one of the most attractive features of Islamic culture. The master calligraphers could easily find Qur'anic justification for the importance of writing: did not the Holy Book speak of the 'Divine Pen' and the 'Well-Preserved Tablet', on which the fate of everything created was written in pre-eternity? Are not man's actions noted down in a book which will be opened at Doomsday? The mysterious letters at the beginning of several Qur'anic *sūras*, particularly the beginning of *Sūra* 68: '*Nūn*, and by the Pen!' could inspire the pious to ponder the secret qualities of letters, and to invent ever new variations in order to write the Qur'ān in a style worthy of its eternal message. Poets might therefore open their treatises on calligraphy with invocations like that of Sulṭān ʿAlī's contemporary, Majnūn Harātī:

Come, o pen, and write letters
In the name of the Writer of the Well-Preserved Tablet and the Pen![2]

In the development of calligraphy, Persia has played a very important role. It is claimed that the fourth caliph of Islam and first Imām of the Shīʿa, the Prophet's cousin and son-in-law ʿAlī ibn Abī Ṭālib (d.41/661), was the first to write in a peculiar style of the so-called Kufic script, and later calligraphers would inevitably trace back their pedigrees to him – as Sulṭān ʿAlī Mashhadī states in his poetical epistle: 'The renown of my writing is due to the name of ʿAlī!'[3] Calligraphy was thus much more than simply noting down texts. The pen, made of reed and trimmed with great skill according to strict rules, was considered to be 'the cypress in the garden of Knowledge'.[4] That is why Sulṭān ʿAlī says:

The aim of Murtaḍā ʿAlī in writing
Was (to reproduce) not merely speech, letters, and dots,
But fundamentals, purity and virtue;
For this reason he deigned to point to good writing.[5]

Calligraphy can be regarded as an expression of man's spiritual state; for 'purity of writing proceeds from purity of heart'; therefore the calligrapher had to undergo observances similar to those of the ascetic.

Facing page from top:
3. From the palace of Masʿūd III in Ghazna: a) the word *gudhashta* b) the word *kasī* c) four out of 25 shapes for the letter 'd'.

4. From Nā'īn.

5. From the Masjid-i Ḥaydariyyeh in Qazvīn.

6. A *ṭughrā* style Qur'anic inscription (*Sūra* 2/132: 'And He will suffice you against them, and He is the Hearing, the Knowing') from Yazd, mid-8th/14th century.

This page
2. From the tomb of Masʿūd I in Ghazna.

1. Page from a Qur'ān in so-called Qarmathian Kūfī, Eastern Persia, 3rd/11th century. Private collection, Cambridge, Mass.

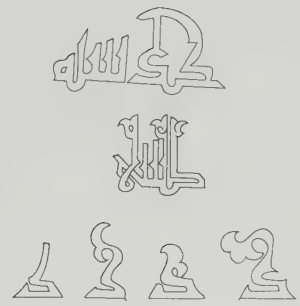


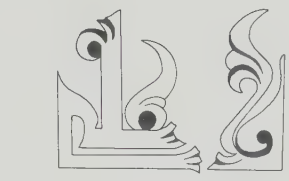


The history of calligraphy in the Islamic world begins with the Qur'āns written in the stern and majestic 'Kufic' writing, distinguished by its angular letters and lack of diacritical marks, on broad sheets of vellum, the origins of which are difficult to determine. In the early centuries the style of writing was quite uniform throughout the Muslim world, but not later than the 4th/10th century, a peculiar style of Kufic developed in the eastern fringe of the Islamic world. It is found first on Samanid pottery, produced in places like Samarqand and Nīshāpūr (see Chapter 17, pl. 1). These vessels contain words of blessing or proverbs in exquisite characters which indicate the artistic achievements of the calligraphers of eastern Persia at an early stage – whether the letters be very simple with high, slender ascenders or whether they grow into floral and foliated terminals. The letters in manuscripts, too, become slimmer and more elegant; the ligatures are more inventive; scrolls may divide into floral shoots; and the endings of some letters are oblique, thus giving a more rhythmical movement to the pages. This style, which the American scholar Eric Schroeder wanted to identify with the *badī'*-script reaches its apex in the 5th/11th century in the so-called Qarmathian Kūfī, a Persian style where the letters show a fascinating contrast between extremely high and slim ascenders and a somewhat crouching range of slightly oblique lower letters. In the finest example of this style, a Qur'ān whose pages are scattered all over the world, the elegant, sometimes discreetly plaited letters are set on a delicate background of arabesque scrolls in mellow colours (pl. 1). This style, which was to develop into that small, rather angular hand in which quite a few Qur'āns from the 6th–7th/12th–13th centuries are written, closely resembles architectural epigraphs from the same period (pl. 2).

Indeed, one can barely speak of the early development of calligraphy in Persia and the adjacent areas without at least mentioning the magnificent architectural inscriptions – whether we look at the stern but plaited Kūfī in turquoise tiles in the madraseh of Ghiyāth al-Dīn Ghūrī in Herat (592/1195) or the stupendously rich inscriptions in complicated Kūfī in Ghazna. The Kufic inscription in Persian verse in the palace of Mas'ūd III (492–508/1099–1115, pl. 3) is one of the few major examples where this style is used for Persian; the other examples being in places as distant as Bukhārā, Uzgand, Delhi, and Nakhchivan. The Persian poem in Ghazna, written in the metre of Firdausī's *Shāh-nāma*, seems to point to a 'revival of Iranism' under the later Ghaznavids and corresponds to the practice of affixing ceramic panels with verses from the *Shāh-nāma* to city walls.[8]

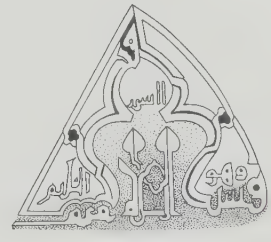
The architectural inscriptions of Persia offer an almost unlimited breadth of varieties: foliated letters, as in Nā'īn (pl. 4); plaited Kūfī interspersed with smaller lines of script, like the Friday Mosque in Varāmīn (723–5/1322–6) or the Masjid-i Ḥaydariyyeh in Qazvīn (pl. 5); Qur'anic inscriptions in what was later called *ṭughrā* style, e.g. forming a closed shape or even a mirror-image as in Yazd (pl. 6); almost tapestry-like plaiting of letters when the material (stucco) allowed it or when the inscription was painted, as in Pīr-i 'Alamdār in Dāmghān (418/1027–8); long sets of pious ejaculations, Qur'anic sentences or names of holy personalities in square Kūfī in brick (pl. 7) (one of the finest examples from the early 8th/14th century in Pīr-i Bakrān) and other shapes[9]. The very simple lines of the letters which form the words of the Islamic profession of faith with its ten verticals and two smaller letters which can easily be regarded as squared, allowed the development of square patterns, which were also created from the name of Allāh, that of the Prophet, and of 'Alī ibn Abī Ṭālib. These could be formed from simple bricks or from obliquely set coloured tiles, as is so often the case on Ṭīmurid and Safavid buildings (pl. 8). The Friday Mosque in Iṣfahān can be



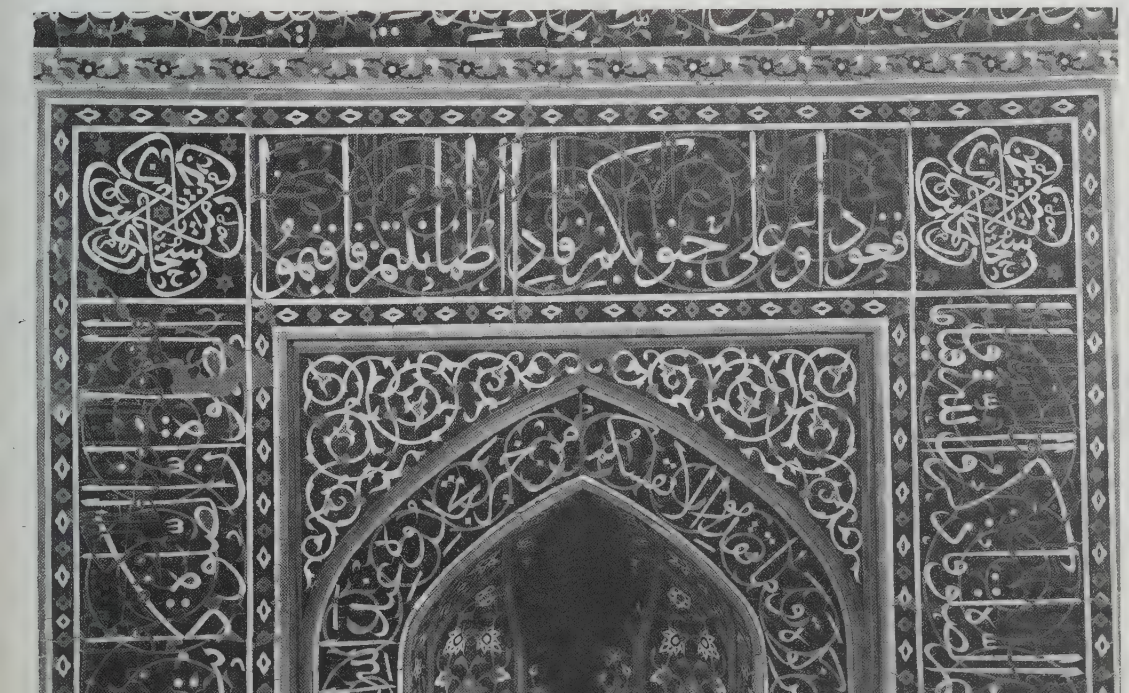




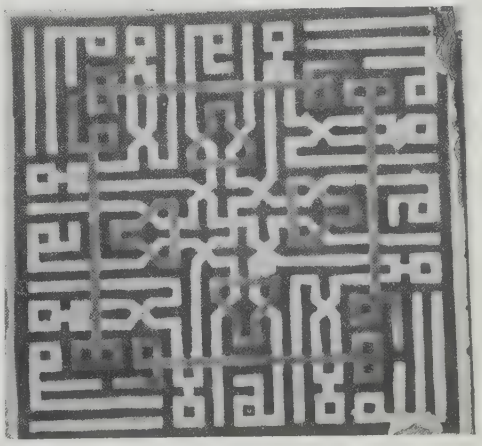


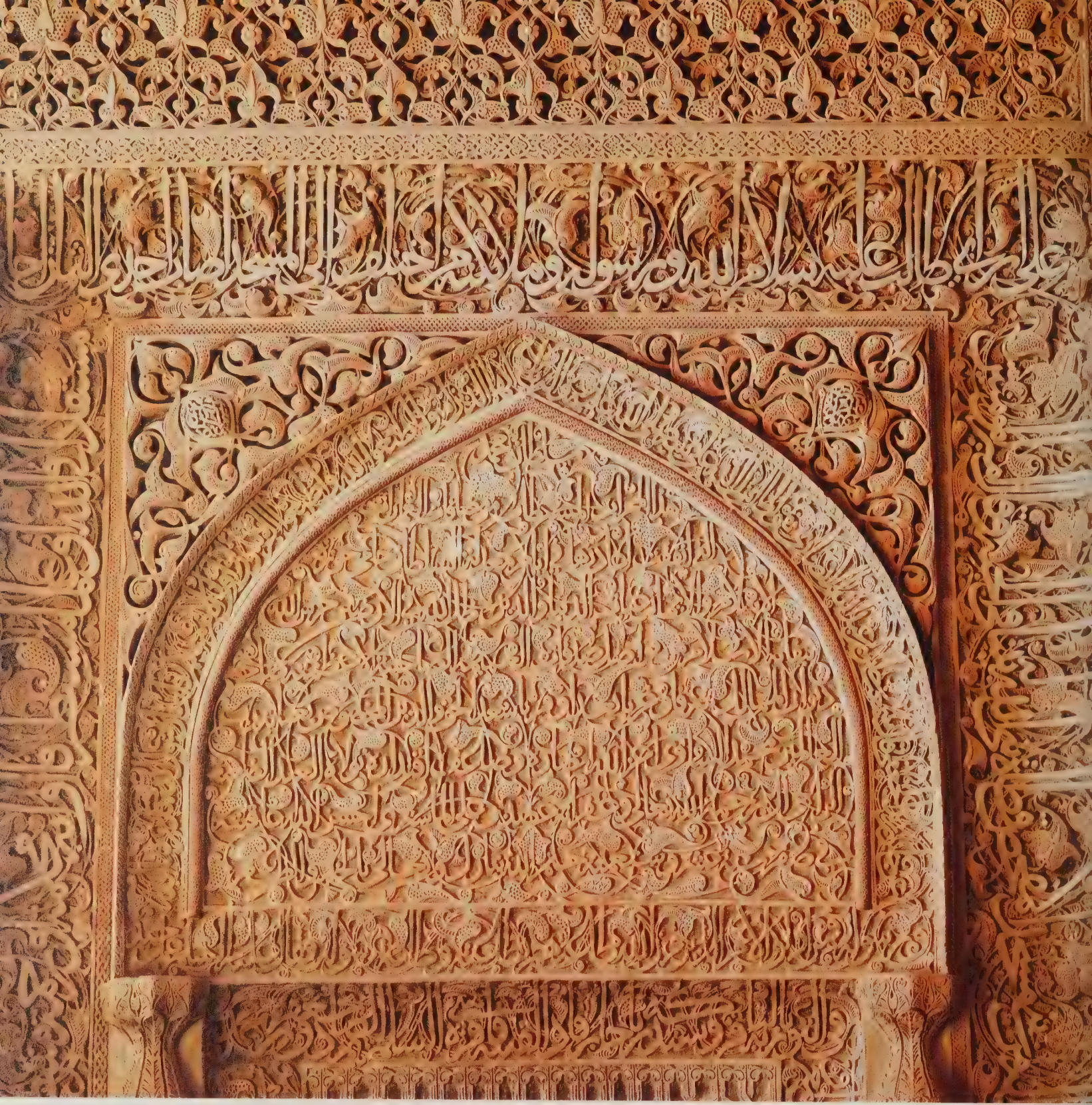


7. Faience tile with the profession of faith and the word He, *hū*, in fourfold repetition in squared Kūfī, Persia 7th/13th century, The Art Institute in Chicago.



8. Prayer niche in faience mosaic with inscriptions in elegant *thuluth*, Persia, first half of the 10th/16th century. Museum für Islamische Kunst, Staatliche Museen Preussischer Kulturbesitz, Berlin (West).





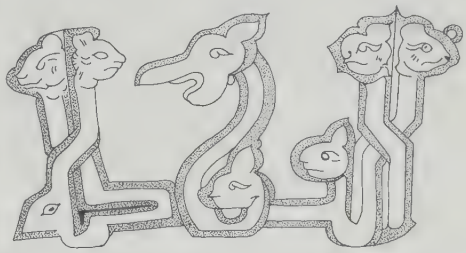
9. Prayer niche in the Friday Mosque, Iṣfahān, built by Öljeitü in 710/1310, with the profession of faith in the Shī'a wording in plaited Kūfī, and inscriptions in *thuluth* on floral background.

regarded as a model for every possible style of calligraphic decoration, beginning with the network of plaited Kūfī in Öljeitü's prayer niche which is crowned by highly involved *thuluth* on a floral background (710/1310) and culminating in large panels of elegant *thuluth* inscriptions of the 11th/17th century (see pl. 9)

The study of medieval Persian ceramics offers more than only aesthetic pleasure: the Kāshān and Gurgān faiences of the 6th and 7th/13th and 14th centuries often contain interesting Persian or Arabic literary texts which are, however, scribbled in quite illegible characters, not to be compared with the stately beauty of Samanid pottery. Particularly interesting calligraphic examples are found on a certain group of medieval metalwork in which the letters, often silver inlaid in brass, end in human or animal heads or are completely made up from zoomorphic shapes. Pieces like the 'Bobrinsky kettle' in Leningrad (see chapter 10) or



10. Detail from a bronze canteen with an inlaid silver inscription in anthropomorphic and zoomorphic letters, Mosul school, 6th–7th/12th–13th century. Freer Gallery of Art, Washington, D.C.



11. *al-baraka*, 'blessing' in zoomorphic from, from a bronze bowl in the Victoria and Albert Museum, London; probably Khurāsān, 6th/12th century.

a silver bowl in the Victoria and Albert Museum prove the uninhibited imagination of the artists (see pls. 10 and 11). On the other hand, for technical reasons, early silks use rather angular characters and their setting can produce interesting effects, as the *Survey of Persian Art* states: 'The verticals in this tall type are marshalled in a processional rhythm, and this recurs in almost hysterical exaggeration in the close-jostling verticals of a textile inscription.'[10] Later, silk and velvet are often decorated with fine examples of cursive writing in various styles (pl. 12). Gold and silver coins and the agate seals of Persia with their deepset inscriptions, early examples of which show simple or floriated Kufic script, were to become models of an elegant cursive style in later times.

This emphasis on the beauty of writing is natural, because calligraphy on vellum and paper owed much to the artists of Persia. In fact, the first master to develop the rules for the cursive hand, *naskh*, the famous vizier Ibn Muqla (d.328/940) was a native of Shīrāz. Earlier, Ibrāhīm al-Sijzī from Sīstān had been a scribe at the 'Abbasid court, and later, Abu'l-Ḥusayn al-Daylamī (d.428/1036) was a disciple of Ibn al-Bawwāb, the second master of the cursive style which was elaborated in six distinct sub-styles according to the aim of the writer (copying, chancellery, majestic decorations, etc.). Among the outstanding 'six disciples' of Yāqūt, the master calligrapher (d.697/1298) Aḥmad Suhravardī, of Persian extraction, is worthy of mention; he decorated many buildings in Baghdad with his inscriptions, and some of his thirty-three Qur'āns are preserved in Europe and Iran (pl. 13).[11]

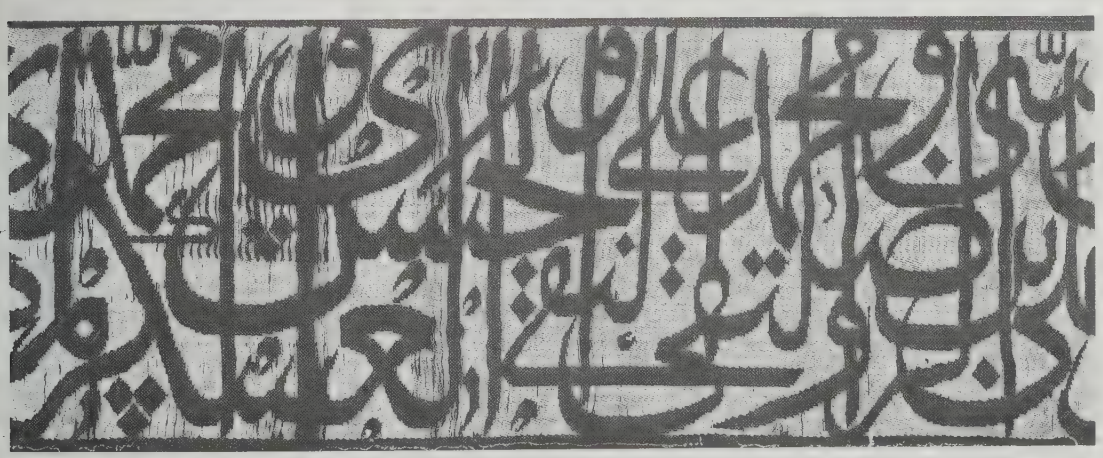
Persian calligraphers excelled in all styles of cursive writing, be it the elegant large *muḥaqqaq* or the finer *rīḥānī*, both with sharp final endings; be it the dust-like *ghubār* or the heavy but pliable *thuluth* script. In the late 8th/14th century 'Umar Aqta', 'with amputated hand,' wrote a miniature Qur'ān for Tīmūr (d.807/1405); it was so small that it could be fitted under the socket of a signet ring. When Tīmūr disapproved of it because, according to a Prophetic tradition, the Word of God should be written in big letters, the calligrapher produced another copy each of whose lines was a cubit in length.[12]

Tīmūr's descendants were not only connoisseurs but masters of calligraphy. Most famous among them were his grandsons, Bāysunqur Mīrzā (d.837/1433) and Ibrāhīm Sulṭān (d.838/1434). The latter, a disciple of Sharaf al-Dīn Yazdī, the author of the *Ẓafar-nāmeh*, was a master in the six styles. He composed many inscriptions on buildings in his capital, Shīrāz, in 835/1431–2. Huge letters seem to have been his speciality for one of his Qur'āns was about ¾ metre long and over ½ metre wide. This is probably the copy with golden

12. *Tirāz*, inscription woven in silk with the names of the twelve Imāms; length of the whole piece 214; 5 cm. Persia, 10th/16th century. Museum für Islamische Kunst, Staatliche Museen Preussischer Kulturbesitz, Berlin (West).

13. Page from a Qur'ān, end of *Sūra* 5/42, in *muḥaqqaq* with Persian interlinear translation and prophetic traditions in Kufic characters around the pages. Persia, late 7th/13th to early 8th/14th century. Chester Beatty Library, Dublin, MS 1609.







14. Qur'ān, *Sūra* 1, written by Aḥmad-i Nayrīzī in superb *naskh*, dated Ṣafar 1125/March 1713. Chester Beatty Library, MS 1561.

letters (65 to 54 cm), which is now in Shīrāz.[13] Another, smaller, Qur'ān of his, dated 834/1430–1, is written in elegant golden *rīḥānī* script.[14] His brother Bāysunqur Mīrzā in Herat was a master of decorative *thuluth*; one of his Qur'āns in *muḥaqqaq* script is at present in Mashhad.[15] The prince gained fame as the outstanding bibliophile of his age. Manuscripts from his library, where he employed forty calligraphers, are the pride of every museum (pl. 16). Numerous copies of Persian literary manuscripts, among them a famous edition of Firdausī's *Shāh-nāmeh* were produced at the Timurid court of Harāt during Baysunghur's days and it was here that *nastaʿlīq* (see below) was perfected.

The art of writing Qur'āns in one of the classical styles never died out in Persia. However, it is Mīrzā Aḥmad Nayrīzī in the early 12th/18th century who is regarded as the last great master of *naskh* (pl. 14). Qur'āns from his hand show a clearer difference between the thicker and thinner parts of the letters than is the case in earlier and in Turkish *naskh*, a feature that is probably due to a very obliquely cut pen.[16] On the whole Arabic manuscripts from Persia in *naskh*, such as small Qur'āns, prayer books, etc., are distinguished by a very composed style; the letters are strictly vertical (while in the Turkish tradition they have a slight slant toward the left); the rather small round endings are of immaculate precision so that the manuscripts usually look very calm and sedate.

As much as the art of the 'six styles' was perfected in Persia in every medium, one usually associates with Persian calligraphy another particular style. Already early Persian manuscripts show a tendency to a somewhat 'hanging' movement that goes from the upper right to the lower left. This tendency grows out, logically, from the grammatical structure of Persian, where long-stretched letters like t, sh, st often form the endings of words. The style called *taʿlīq*, 'hanging' was – at least in the 10th/16th century – typical of chancellery writing. Qāḍī Aḥmad mentions exclusively *munshīs*, official scribes, as masters of *taʿlīq*, the greatest authority being Khwājeh ʿAbd al-Ḥayy Astarābādī.[17]

Shortly after 803/1400 Mīr ʿAlī Tabrīzī developed out of this style the *nastaʿlīq*, a style which most perfectly corresponds to the character of Persian poetry and has a certain musical, almost dancing quality.[18] Mīr ʿAlī, surnamed *qudwat al-kuttāb*, 'model of scribes', is said to have dreamt of a flight of geese whose wings and movements inspired the shapes of letters. Even today teachers of *nastaʿlīq* tell their pupils to shape this or that part of a letter like a bird's wing, beak, or head. The expression *nastaʿlīq* has been explained differently – either as taʿliqicised *naskh*, e.g. a refinement of the cruder 'hanging' style by means of the rules of measurements with dots as used for the cursive hand since Ibn Muqla's days, or, in a pun, as abrogation, *naskh*, of *taʿlīq*.[19]

Mīr ʿAlī Tabrīzī's style was perfected by his son ʿAbdallāh Shakarīnqalam, 'with sugared pen'.[20] At almost the same time a different form a *nastaʿlīq* was developed by Maulānā ʿAbd al-Raḥmān al-Khwārazmī who worked at the court of Yaʿqūb, the chief of the White Sheep Türkmens. He and his two sons ʿAbd al-Raḥīm Anīsī and ʿAbd al-Karīm Pādshāh (who was somewhat deranged) were later held responsible for the 'deformation of writing', but the material available does not allow us to verify this verdict.[21] Certainly, they developed a style that became popular in western Persia. Mīr ʿAlī Tabrīzī's style, however, was emulated by the majority of Persian masters. Among them the most outstanding names are thoses of Sulṭān ʿAlī Mashhadī and his disciple Mīr ʿAlī of Herat.

Sulṭān ʿAlī Mashhadī, the *sulṭān al-khaṭṭāṭīn*, 'Prince of calligraphers', served at the court of Herat for almost forty years.[22] A disciple of Maulānā Azhar Haravī, he describes his education in his little poem *Sīrāt al-khaṭṭ*, 'The Way of Writing', a touching piece of autobiography. Here, he advises the scribe that constant practice – in small writing at daytime, in the large hand in the evening – is required as much as internal and external purity; one needs more ink 'as black as my fortune' (black fortune = misfortune); a pen, 'restless like my eyelashes which always shed tears', and a writing as beautiful as the down of the beloved (the usual pun on *khaṭṭ*, which means both 'script' and 'down'.) Many examples of Sulṭān ʿAlī's handwriting are found in museums all over the world.

His outstanding pupil was Maulānā Mīr ʿAlī Haravī who came from a *sayyid* family in Herat and whose father was also a calligrapher.[23] The young man, who usually signed his work as '*Faqīr Mīr ʿAlī*' apprenticed himself to Sulṭān ʿAlī in Mashhad and wrote some of the inscriptions at Imām Riẓā's mausoleum. Then, he worked in Herat and proved not only a first-class calligrapher but also a skilful poet and riddle-maker. He, too, points to the necessity of constant practising:

> Forty years of my life became wasted by calligraphy;
> The tip of calligraphy's tresses did not come easily in my hand.
> Everyone who sits leisurely for a moment without practising –
> Calligraphy goes from his hand like the colour of henna.

In 935/1529 the Uzbek ruler ʿUbayd Allāh Khān took him, like many other artists, to his



15 and 17. Two pages from a series of Persian verses with miniatures, written by Faqīr Mīr ʿAlī Haravī, Bukhārā, *c.*941/1535. Fogg Art Museum, Cambridge, Mass.

capital Bukhārā, and Mīr ʿAlī (who then often signed as *al-kātib al-sulṭāni*, 'the royal scribe') complained about his exile in his verses:

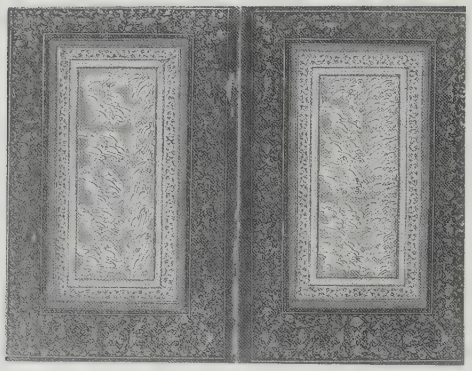
> This misfortune came upon me from the beauty of my script –
> Woe to me, that the script became the chain of the feet of me, the madman!

He excelled in composing single pages. One series is exquisitely decorated with miniature figures (pls. 10, 15 and 17). 'The scroll of his life was rolled up' in 966/1558, but probably earlier, as Qāḍī Aḥmad claims, and he is buried in his hometown. Qāḍī Aḥmad tells that Shāh Ismāʿīl's grandson, Ibrāhīm Mīrzā (executed at the age of 24 in 982/1575) and a distinguished calligrapher himself,[24] was particularly fond of Mīr ʿAlī's writings which he collected for his library. Many calligraphers left Herat after Ḥusayn Bāyqarā's death in 912/1506 and found shelter in Tabrīz, Qazvīn and later in Iṣfahan for like the Timurids, the Safavids combined interest in and talent for calligraphy: Bahrām Mīrzā was as good a calligrapher as Shāh Ṭahmāsp (d.984/1576), who was a fine connoisseur of art; Niẓām al-Dīn Zarrīnmqalam 'with golden pen' copied Niẓāmī's *Khamseh* in the most minute *ghubār* script for him.[25] More important, however, is Mīr ʿImād Ḥusaynī Qazvīnī who followed Mīr ʿAlī's



16. Page from a Qur'ān, alternatively written in *thuluth* and *naskh* on coloured paper, by Rūzbihān Muḥammad-i Tabʿī-yi Shīrāzī, 10th/16th century. Chester Beatty Library, Dublin, MS 1558.





18. Verses from the *Dīvān* of Ḥāfiẓ in *shikasteh*, Persia, 13th/19th century. Fogg Art Museum, Cambridge, Mass.



19. Lion, composed of pious ejaculations. Persia, 13th/19th century (?).

20. The Formula 'In the name of God the Compassionate the Merciful' in bird shape. Persia, Probably 18th/19th century. After Ernst Kühnel, *Islamische Schriftkunst*.



style and is called in all later sources the greatest master of *nastaʿlīq*. He copied the *Shāh-nāmeh* and Jāmī's poetry for Shāh ʿAbbās, but was murdered in 1024/1615 due to some rivalry. Shāh Jahān, the Mughal ruler of India, admired his work greatly.[26]

The number of excellent writers of *nastaʿlīq* in Persia and the neighbouring countries which were under Persian cultural influence is legion (pl. 26). The style developed in Turkey, and in the Subcontinent it was used for Urdu as well. But as much as Kufic writing is generally connected with Arabic, as little has *nastaʿlīq* to do with Arabic. To be sure, there are some pious sentences and prayers written in the 'hanging' *ductus*, but attempts were only rarely made to write a whole Qur'ān in *nastaʿlīq*. We know of three major calligraphers of the 10th/16th century who either attempted to or succeeded in producing a Qur'ān in *nastaʿlīq*; a very famous example, that of Shāh Maḥmūd-i Nīshāpūri, Shāh Ṭahmāsp's favourite calligrapher (dated 945/1538–9) is preserved in Istanbul.[27] The general opinion, however, is that a Qur'ān in *nastaʿlīq* is not an elegant sight.

Out of this delightful, well-measured hand another style developed, which is known as *shikasteh*, 'broken'. Although according to most later authorities it was invented by Sayyid Shafīʿā of Herat, we may as well believe Qāḍī Aḥmad who says that his own father, Mīr Munshī Ḥusayn, 'wrote the *shikasteh*, which is a combination of *nastaʿlīq* and *taʿlīq*'. This latter seems to point to a more elegant style to be used for chancellery purposes.[28] As for Shafīʿā (d. 1085/1674–5), he was in the service of Murtaḍā Qulī Khān Shāmlū, the governor of Herat, who was a good calligrapher himself; for him, he invented a script 'like the tresses of brides'. The extant examples show a most elegant but still legible hand.[29] One century later, Darvīsh ʿAbd al-Majīd Ṭāliqānī (d. 1185/1741–2) in Iṣfahān produced a powerful *shikasteh* and is regarded as the true master of this complicated style. He even wrote a most elegant *Fātiḥa* (*Sūra* 1 of the Qur'ān) in the 'broken' hand (dated 1178/1764–5).[30] *Shikasteh* became very popular in India too, and its use coincides with a period which the word *shikast*, 'broken', was a key expression in Indo-Persian poetry. But '*shikasteh* went towards disintegration and finishing',[31] and pages with *shikasteh* texts look more like modern graphics than a legible script (pl. 18). Still, they have a charm of their own, similar to early Kufic writing which seems illegible at first sight and yet impresses the onlooker by its sheer aesthetic qualities.

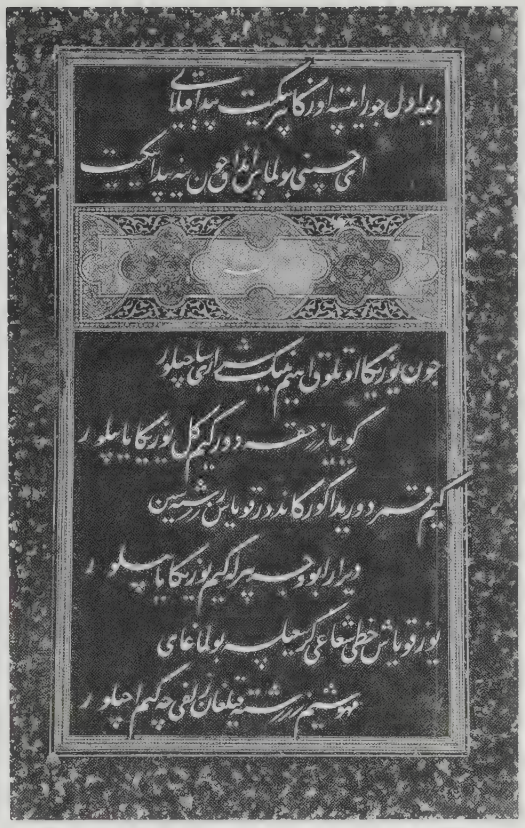
Sources also tell about artists who were able to write the big *thuluth* characters with bare fingers,[32] or who invented peculiar styles of their own, such as Maulānā Maḥmūd Chapniwīs, who combined letters so as to form images of men and beasts.[33] He may have been influenced by earlier metalwork, or may have started the fashion to produce figures from meaningful sentences. Thus, the name of ʿAlī Ḥaydar, the 'Lion of God', would form a more or less impressive lion (even Maḥmūd-i Nīshāpūri wrote a lion in *thuluth*!)[34]; horses, and birds were combined from the *Fātiha* or other important quotations like the Throne-verse (*Sūra* 2/256) or the invocation *Nādī ʿAliyyan* to serve as a talisman (pls. 19–20). Or else, pictures of men and animals were made up from pious sentences in diminutive *ghubār* script. The representation of ʿAlī (pl. 21) is a fine example of this art, and there is even a human face made up from the words, Allāh, Muḥammad, ʿAlī, Ḥasan and Ḥusayn (pl. 23).

A special feature of Persian calligraphy in the late 9th and 10th/15th and 16th centuries was decoupé work.[35] ʿAbdallāh ibn Mīr ʿAlī was the outstanding master of this art during the last days of the Timurid rule in Herat. His copy of Sulṭān Ḥusayn Bāyqarā's *Dīvān*, in which minute white cut-out *nastaʿlīq* letters are pasted on gold-sprinkled coloured paper is now dispersed all over the world (pl. 22). The beauty of the writing itself, particularly of the soft and sensuous *nastaʿlīq*, was enhanced by the use or coloured paper or coloured ink. Sometimes, miniatures were inserted into the text, or floral ornaments put in the background so that one fully understand Maulānā Rūmī's story about the ants who admired a manuscript which reminded them of a garden with narcissus and sweet basil (an allusion to *rīḥānī* 'basil' script). Some pages on which, as occurs often, *nastaʿlīq* is written obliquely over flower decorations are almost reminiscent of Chinese art. Both *naskh* and *nastaʿlīq* could be treated as *gulzār*, that means that flowers fill each letter (pl. 27).

The calligrapher would practice the letters time and again, combining them with each other, and would develop even these exercise sheets to such perfection that they can be enjoyed for their beauty without conveying any meaning. Even the *muswadda*, a paper on which the same lines were written over and over again, crossing and overlapping, developed into an art of its own.

The *nastaʿlīq* was not restricted to manuscripts or ceramics. The development of the 'hanging' style on coins, seals, silk, and the cartouches of rugs is worth mentioning. It was also used in metal inlay and in stone carvings where it is often combined with some decadent Kuficising script. It goes without saying that there developed styles within a style, often discernible only to the eye of the specialist but revealing the particular strength of a certain master or school.



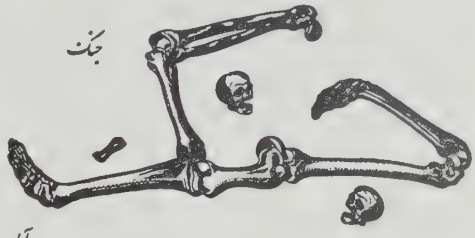


21. Figure of ʿAlī ibn Abī Ṭālib, composed of Qur'ānic sentences, such as the Throne-verse (*Sūra* 2/256), and prayers. Persia, dated 1244/1828-29. Fogg Art Museum, Cambridge, Mass.

22. Page from the *Dīvān* of Sulṭān Ḥusayn Bāyqarā in Chaghatai Turkish, in decoupé work, white on dark blue paper, Herat, *c.* 1500. Private collection, Cambridge, Mass.



23. Human face made up from the words Allāh, Muḥammad, ʿAlī, Ḥusayn. 13th/19th century.



24. The word *jang* 'war', written by Adharbod.

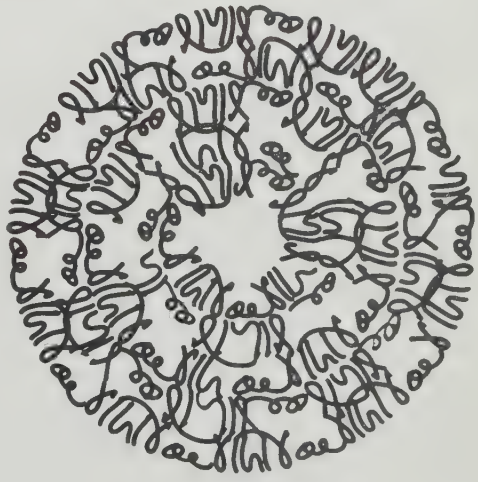
It should further be stressed that the art of writing is a vital ingredient in Islamic culture in general and in Persian poetry in particular. Innumerable allusions to the various styles, or to the names of the leading calligraphers like Ibn Muqla and Yāqūt, and especially the pun on *khaṭṭ* 'script' and 'down on the lip of the beloved' have been elaborated in ever new variations. The fact that oriental ink is dissolvable in water made the poets hope that they might 'wash off the black book of their sins with the water of their tears'. Numerous puns pointing to peculiar styles of writing are found in Persian poetry from its very beginning. Thus, when Khāqānī, the great medieval poet (d. 595/1199) says:

> I bound the eye of greed and broke the teeth of greediness,
> Like an *m* in the hand of a calligrapher, like an *s* in the *dīvānī* script,

he points to the rule that the letter *m* (usually the symbol for the narrow mouth of the beloved) be completely closed, whereas the *s* in the hand of the scribe in the chancellery consists of one prolonged, stretched line without its three 'teeth' by which it is distinguished in the other styles. Poets of the 5th and 6th/11th and 12th centuries, who still had Kufic manuscripts before them, might allude to the 'narrowness of the Kufic *k*', while Bēdil (d. 1133/1721), in the time of decadence, sighs:

> Our dust writes letters towards the friend,
> But with dust [= *ghubār*] script.

25. 'There is no deity save Him' in mandala form, written by Hoseyin Ziai.



It is not surprising that the calligraphic tradition has remained alive in Persia and the countries under its cultural influence. Sometimes one has the feeling that certain European ideals might have influenced the handwriting of this or that master in the 12th/19th century; but the artists never ceased inventing surprising new calligraphic pictures (pl. 29). Contemporary works about calligraphers in Iran reveal the importance of the traditional ideals of beauty as well as the possibilities of creative pictorial writing visible, for instance, in some of the writings of Afḍal al-Dīn Adharbud (born 1287/1908) (pl. 24).[36] Persian artists, such as Ḥusayn Zīāī, are still able to produce amazing results from the repetition of religious formulas like *Lā ilāha illā huwa*, 'There is no deity save Him' in fine network and mandala-like shapes (pl. 25). Here, as much as in the case of the complicated inscriptions on minarets and mosques, or the intricate lacework of plaited kūfī on stucco or metalwork, or in the



26. Persian verses from Ḥafiẓ in *nasta'līq* on blue paper with gold; Persia, 10th/16th century. Fogg Art Museum, Cambridge, Mass.



27. A Persian verse in *gulzār* (floriated) *nasta'līq*, Persia, probably 11th/17th century. Fogg Art Museum, Cambridge, Mass.

huge Qur'āns of the 8th and 9th/14th and 15th centuries, or the delicate poetic anthologies of Persian verse in lavishly decorated papers, we would certainly agree with Qāḍī Aḥmad's statement:

> If someone, whether he can read or not, sees a good writing,
> He likes to enjoy the sight of it.
>
> هر که خط خوب بیند خواه خواننده وخواه أمّی بتماشای آن مایل شود.



28. Page in *tughrā* style, made up from word from *Sūra* 28/88: 'There is no god but He. Everything will perish except His face.' Persia, 13th/19th century. Fogg Art Museum, Cambridge, Mass.

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2

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THE PARTHIANS

NOTES

1. cf. R.H. McDowell, 'The History of Seleucia from Classical Sources', in C. Hopkins, (ed) *Topography and Architecture of Seleucia on the Tigris*, Ann Arbor 1972, pp. 149–63.
2. There are a number of coin catalogues in which this principle is acknowledged, but Sellwood's 1971 commentary remains the most up-to-date. An extensive discourse on some specific problems with regard to unnamed coin attributions is to be found in Le Rider, *Suse sous les Seleucides et les Parthes*, Paris 1965.
3. M. Boyce speaks of the 'pathetic' number of preserved inscriptions in 'Parthian Writing and Literature', *Cambridge History of Iran*, third edition II, p. 1154.
4. An English summary on the Nisa documents can be found in I.M. Diakonoff and V.A. Livshits, *Novye naxodki dokumentov v staroi Nisa*, Peredneaziatskii Sbornik II, Moscow 1960, pp. 169–63.
5. The most die-hard repetition of these attitudes is to be found in Colledge's numerous works on the subject of Parthia and Parthian art.
6. The most convincing argument in this regard remains a detailed analysis of a specific period of late Parthian history, from which can be extrapolated the sense of an overall decline in Parthian territorial control. See V. Kahrstedt, *Artabanos III. und seine Erben*, Bern 1950.
7. Following the reports of the early travellers, the monumental columns and terrace at Kangāvār were traditionally taken to reflect the Temple of Artemis referred to at Kogkabar in the *Parthian Stations* by Isidore of Charax. However, although Parthian remains were found in the area, excavations in the 1970s revealed that the terrace was a work of the Sasanian period. See M. Azarnoush, 'Excavations at Kangavar', *Archäologische Mitteilungen aus Iran* XIV, 1981, pp. 69–94.
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12. For Dura, see S. Downey, *The Stone and Plaster Sculptures*, (Excavations at Dura-Europos, Final Report 3, II, [fasc. I], Los Angeles 1977.
13. On Palmyra, see M.A.R. Colledge, *The Art of Palmyra*, London 1976; and K. Tanabe, *Sculptures of Palmyra*, Tokyo 1986.
14. This premiss, which was originally presented by McDowell in 1935, continues to remain valid, even with the discovery of new coin hoards. See R.H. McDowell, *Coins from Seleucia on the Tigris*, Ann Arbor 1935, pp. 169–77.
15. re. excavations at Ashur, see Andrae and Lenzen, *Die Partherstadt Assur*, Leipzig 1933; re. Nippur, see J. Knudstad, 'A Preliminary Report on the 1966–67 Excavations at Nippur', *Sumer* XXIV, 1968, pp. 96–106; re. Larsa, see J.-L. Huot, ed., *Larsa et 'Oueli*, Paris 1983; re. Warka, see H. Fenner and J. Schmidt, 'Parthischen Ruinen im Gebiet des Gareus-Temples' *XXIX und XXX Vorläufiger Bericht uber die von dem Deutschen Archäologischen Institut aus Mitteln der Deutschen Forschungsgemeinschaft unternommenen Ausgrabungen in Uruk-Warka*, Berlin 1979, pp. 85–8.
16. cf. S. Downey, 'Two Early Buildings at Dura-Europos and the Early History of the Iwan', *Mesopotamia* XX, 1985, p. 123.
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24. cf. fn. 17 above; and R. Ghirshman, *Terrasses sacrées de Bard-è Néchandeh et de Masjid-i Solaiman*, Mémoires de la délégation archéologique en Iran XLV, Paris 1976.
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26. cf. R.N. Frye, *The Heritage of Persia*, Cleveland 1963, p. 189.
27. E.J. Keall et al., 'Qal'eh-i Yazdigird: its Architectural Decorations', *Iran* XVIII, 1980; Keall, 'A Persian Castle on the Silk Roads' in Vollmer et al. *Silk Roads: China Ships*, Toronto 1983.
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ARCHITECTURE

NOTES

1. The format of this chapter, and the need to summarise complex developments in very compact form, while also citing a substantial number of examples as supporting evidence, makes the provision of detailed footnotes inappropriate. It has therefore seemed better as a matter of principle not to cite references to every single building mentioned below. Instead a rule of thumb has been followed whereby footnotes will only be given for more detailed discussions of buildings, for monuments which are not mentioned in the standard bibliographies noted below, or for general issues. Those interested in fuller bibliographical references to the material cited in this chapter should consult the relevant sections of K.A.C. Creswell, *A Bibliography of the Architecture, Arts and Crafts of Islam to 1st Jan. 1960*, Cairo 1961, with its attendant *Supplements* I, Cairo 1973 and II, Cairo 1984 and – more conveniently – the splendid bibliography of O. Grabar and S. Blair in 'Architecture v. Islamic, Pre-Safavid', *Encyclopaedia Iranica*, II/4, 1986, cols. 342a–45b. The latter definitively supersedes all earlier selective bibliographies of medieval Persian architecture.
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5. C.K. Wilkinson, *Nishapur. Some Early Islamic Buildings and Their Decoration*, New York 1987, pp. 53, 56, 61 and 65.
6. Compare the location of the minaret in princely mosques as important as the Qayrawān Jāmi' and the Cordoba Jāmi'. Perhaps this should give one pause; it certainly leaves scope for other interpretations of the absence of precise axiality than mere carelessness.
7. For a discussion of this type of mosque see L. Golombek, 'Abbasid Mosque at Balkh', *Oriental Art* N.S. XV, 1969, pp. 173–89 and C. Ewert, 'Die Moschee am Bāb al-Mardūm in Toledo – eine, Kopie' der Moschee von Córdoba', *Madrider Mitteilungen* XVIII, 1977, pp. 329–51.
8. e.g. the mosque of Mākh near Bukhārā. See R.N. Frye, *The History of Bukhara. Translated from a Persian Abridgement of the Arabic Original by Narshakhi*, Cambridge, Mass., 1954, p. 21.
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12. E. Galdieri, *Isfahān: Masğid-i Ğum'a. 2. Il periodo al-i Būyide*, Rome 1973, pp. 30–4 and pl. 8.
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20. E. Galdieri, *Isfahān: Masǧid-i Ǧum'a. I. Photographs and Preliminary Report*, Rome 1972; *Isfahān . . . 2*; 'The Masǧid-i Gum'a Isfahan: An Architectural Facade of the 3rd Century H', *Art and Archaeology Research Papers* VI, 1974, pp. 24–34; 'Quelques precisions sur le Gunbad-e Niẓam al-Mulk d'Isfahan', *Revue des Etudes Islamiques* XLIII, 1975, pp. 97–122.
21. For the background to this see C. Hillenbrand, 'Who Killed Niẓām al-Mulk and Malikshāh?', in *Proceedings of the XIV Congress of the Union Européenne des Arabisants et Islamisants, Budapest, August–September 1988* (in press).
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24. His achievement is all the more noteworthy when it is remembered that Niẓām al-Mulk had already pre-empted the plum site in the mosque. If the north dome chamber were to provide serious competition for its counterpart to the south, a truly exceptional building was required. Schroeder's guess that the same architect was responsible for both buildings is given added support by the case of the two Kharraqān towers, a quarter of a century apart in time but less than 100 metres apart in space; both are signed by the same architect, both follow the same general ground plan and elevation, yet the later monument surpasses the earlier point by point, as if a formal lesson in the principles of architecture and decoration were being delivered.
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36. For a much enlarged version of the next few paragraphs, see R. Hillenbrand, 'Aspects of Timurid Architecture in Central Asia', in *Utrecht Papers on Central Asia. Proceedings of the First European Seminar on Central Asian Studies held at Utrecht, 16–18 December 1985*, eds. M. van Damme and H. Boeschoten, Utrecht 1987, pp. 255–86.
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40. B. O'Kane, 'The Madrasa al-Ghiyāsiyya at Khargird', *Iran* XIV, 1976, pp. 79–92.
41. B. O'Kane, 'Tāybād, Turbat-i Jām and Timurid Vaulting', *Iran* XVII, 1979, pp. 87–104.
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44. For a survey of the buildings of this period, see R. Hillenbrand, 'Safavid Architecture', in *CHI* VI, pp. 759–842.
45. This was of course true not only of architecture but also of other arts. See the survey of this period in *Studies on Isfahān. Proceedings of the Isfahān Colloquium*, ed. R. Holod, *Iranian Studies* VII/1–2, 1974; A. Welch, *Shāh 'Abbas and the Arts of Isfahān*, New York 1973.
46. Nevertheless, Safavid lustre pottery and the remarkably accurate renditions of early Timurid painting executed some 200 years after the originals leave the way open to explain architectural pastiches as an expression of a general trend of Safavid art.
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48. Cf. E. Egli, *Sinan*, Zürich and Stuttgart, 1954. The notion of writing a biography of any Safavid architect is well-nigh inconceivable.
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55. G. Curatola, *Kalat-i Nadiri. Note sul 'barocco' indopersiano*, Venice 1983.
56. A. Sami, *Shiraz*, tr. N. Sharp, Shiraz, 1958.
57. H. von Gall, 'Die qajarischen reliefs als archäologisches Problem', *Akten*, pp. 617–18; D.N. Wilber, *Persian Gardens and Garden Pavilions*, Rutland, Vt., and Tokyo, 1962, p. 190 and pls. 90–1 and 101.
58. J.M. Scarce, 'Form and Decoration in Qajar Tilework', in *Islam in the Balkans. Persian Art and Culture of the 18th and 19th Centuries*, ed. J.M. Scarce, Edinburgh 1979, pp. 75–85.
59. R. Hillenbrand, 'The Role of Tradition in Qajar Religious Architecture', in *Qajar Iran. Political, Social and Cultural Change 1800–1925. Studies Presented to Professor L.P. Elwell-Sutton*, eds. C.E. Bosworth and C. Hillenbrand, Edinburgh 1984, pp. 352–82.
60. For a typical example of this process see H. Luschey, 'Das qadjarische Palais am Taq-i Bostan', *Archaeologische Mitteilungen aus Iran* XII, 1979, pp. 395–414 and I. Luschey-Schmeisser, 'Nachleben und Wiederaufnahme achamenidischer Elemente in der späteren Kunst Irans', in *Kunst, Kultur und Geschichte und Achamenidenzeit und ihr Fortleben*, eds. H. Koch and D.N. Mackenzie, *Archaeologische Mitteilungen aus Iran. Ergänzungsband* X, Berlin 1983, pp. 276–8.
61. J.M. Scarce, 'The Royal Palaces of the Qajar Dynasty; a Survey', *Qajar Iran*, pp. 329–51.
62. For a general survey of Qajar art and architecture see the chapter on that subject by J.M. Scarce in *The Cambridge History of Iran* VII (forthcoming).

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R. Hillenbrand, 'Safavid Architecture', in *The Cambridge History of Iran VI, The Timurid and Safavid Periods*, eds. P. Jackson and L. Lockhart, Cambridge 1986, pp. 759–842.

B. O'Kane, *Timurid Architecture in Khurasan*, Costa Mesa, Cal., 1987.

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H. and S.P. Scherr-Thoss, *Design and Color in Islamic Architecture*, Washington 1968.
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7

SOME VERNACULAR BUILDINGS OF THE PLATEAU

NOTES

1. Bernard Rudofsky, *Architecture without Architects*, The Museum of Modern Art, New York 1965.
2. Elisabeth Beazley and Michael Haverson, *Living with the Desert: Working Buildings of the Iranian Plateau*, Warminster 1982.
3. C.J. Wills, *The Land of the Lion and Sun, being Experiences of life in Persia from 1866/1891*, London 1891.
4. Thomas Herbert, *Travels in Persia, 1627–1629*, Broadway Travellers edition, London 1928.
5. John Fryer, *A New Account of the East Indies and Persia being Nine years Travel 1672/1681*, III Haklyut Society, repr., London 1912.
6. *ibid.* vol. 2.
7. *ibid.* vol. 2.
8. C. Wills, *The Land of the Lion and Sun.*
9. Hans Wulff, *The Traditional Crafts of Persia*, Cambridge, Mass., 1966.
10. Susan Roaf, *The Wind Catchers of Yazd*, ph.D. dissertation Oxford Polytechnic, forthcoming, and R. Lewcock and Z. Freeth, *Traditional Architecture in Kuwait and the Northern Gulf*, Art and Architectural Papers, London 1978.
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8

CARPETS

NOTES

Any similarities between this chapter and the essay on early Persian carpets in *World Rugs & Carpets*, edited by David Black (Country Life Books, 1985), are due to the fact that Jenny Housego provided the original draft for that article which was subsequently changed, and appeared under another name.

1. Sergei Rudenko, *Frozen Tombs of Siberia*, translated by M.W. Thompson, London 1970, p. 299.
2. Sir George Birdwood, SVA. Oxford University Press, 1815.
3. The excavations were published by S. Rudenko, *Frozen Tombs.*
4. See Nejat Diyarbekirli, 'New Light on the Pazyryk Carpet,' in Hali 3, Autumn 1978, p. 216.
5. See M.S. Dimand and Jean Mailey, *Oriental Rugs in the Metropolitan Museum of Art*, 1973, p. 6.
6. Several of these were excavated by Aurel Stein. See M.A. Stein, *Innermost Asia*, Oxford 1928, vol. I, pp. 227, 248, 250, f. 615, 620, vol. III, pl. 44. Also M.A. Stein, *Ruins of Desert Cathy*, London 1912, vol. I, pp. 380f, pl. 116:4. Others were found at Dura Europos see R. Pfister and Louisa Bellinger, *The Excavations at Dura Europos Final Report IV. Part II. The Textiles*, New Haven 1945, nos. 223, 232, 233. Also at the At-Tar Caves, see Kazuko Sakamoto 'Ancient Pile Textiles from the At-Tar caves in Iraq', *Oriental Carpet and Textile Studies I*, London 1985.
7. See Carl Johan Lamm, *Carpet Fragments. The Marby Rug and some Fragments of Carpets found in Egypt*, National Museum, Stockolm 1985.
8. Jean Ebersolt, *Les Arts somptuaires de Byzance*, Paris 1923, p. 11.
9. Ernst Herzfeld, *Am Tor Von Asien*, Berlin 1920, pl. 44, p. 138.
10. Dimand and Mailey, *Oriental Rugs*, p. 6.
11. Richard Ettinghausen in *Kali, Encyclopaedia of Islam*, Supplement I, 1934.
12. Ruy de Clavijo, *Embassy to Tamerlane, 1403–1406*. Translated by G. Le Strange, Broadway Travellers, 1928. A carpet fragment in the Benaki Museum, Athens, is currently believed to be Timurid, or pre-Timurid. See Louise Mackie in forthcoming *Hali* 47, October 1989.
13. See May H. Beattie, *The Thyssen-Bornemisza Collection of Oriental Carpets*, Ticino 1970, p. 39. She uses this term to describe the design of 'Indo-Persian' carpets. Here the leaves have been transformed into blossoms, but the formula is the same as in the carpet in pl. 2.
14. Rexford Stead, *The Ardabil Carpets*, The Paul Getty Museum, Malibu, California 1974.
15. *Chronicle of the Carmelites in Persia and the Papal Mission of the 17th and 18th Centuries*. 2 vols, London 1939.
16. M. Dimand and Mailey, *Oriental Rugs*, p. 39.
17. Though the grouping of carpets on the basis of structure was an early idea, it was first put into practice only in 1951 by Louisa Bellinger in a catalogue with Ernst Kühnel on *Cairene Rugs and Others Technically Related*, Textile Museum, Washington.
18. May H. Beattie, *Carpets of Central Persia*, Catalogue of an exhibition at Mappin Art Gallery, Sheffield, and City Museum and Art Gallery, Birmingham, World of Islam Festival, 1976.
19. Abu' Fazl 'Allāmī, *The Ain-i-Akbari*. Translated from the original Persian by H. Blockmann, Calcutta 1835.
20. Pedro Teixeira, *The Travels of Pedro Teixeira; with his 'Kings of Hurmuz' and extracts from his 'Kings of Persia'*. Translated and annotated by William F. Sinclair, with further notes and an introduction by Donald Ferguson, Hakluyt Society, Second Series, no. IX.
21. Sir John Chardin, *Voyages du Chevalier Chardin en Perse*, 4 vols, Amsterdam 1735.
22. M.H. Beattie, *Carpets of Central Persia.*
23. F.R. Martin, *A History of Oriental Carpets before 1800*, Vienna 1908.
24. I am indebted to Dr Beattie for pointing this out, and also for her help and advice in preparing this chapter.
25. This is in the Īrān Bāstān Museum, Tehran. See Jenny Housego, '18th-Century Persian Carpets: Continuity and Change', in *Oriental Carpet and Textile Studies III*, Part I, London 1987.
26. In the museum at Sarajevo, this carpet is illustrated in Arthur Upham Pope, *Survey of Persian Art* VI, pl. 1238.
27. For a detailed discussion of the vase-technique carpets see M.H. Beattie, 'Carpets of Central Persia', *Proceedings of the Colloquium* held in conjunction with the exhibition, 9/11th April 1976, edited by M.H. Beattie. 'Vase-Technique Carpets and Kirman', an article by M.H. Beattie, Jenny Housego and A.H. Morton in *Oriental Art*, New Series, XXIII, no. 4, Winter 1977, and also a letter by Robert Skelton where he clarifies previous mistakes in the dating of the Sarajevo carpet, *Oriental Art*, New Series, XXXIV, no. 1, p. 115. See also Ian Bennet, 'Splendours in the City of Silk. Part 2. Ten Safavid Masterpieces.' *Hali* 33, vol. 9, no. 1.
28. *Chronicle of the Carmelites*, I.
29. For examples of this type see, for instance, M. Beattie, *Thyssen-Bornemisza Collection*, no. VIII, and M. Dimand and Mailey, *Oriental Rugs*, nos. 30–5.
30. Jenny Housego, 'The Court of Akbar and Carpets in the in-and-out Blossom Design.' *Facets of Indian Art*, Victoria and Albert Museum, 1986.
31. I am indebted to Barbara Schmitz for this information.
32. Thomas Herbert, *Travels in Persia 1627–1629*, abridged and edited by Sir W. Foster, London 1928.
33. *Sir Anthony Sherley and his Persian Adventure*, edited by Sir E. Denison Ross, London 1933.
34. India Office Library. *Calender of State Papers*. Colonial. East Indies. 1617/1621. Official Correspondence, X, no. 1120. On Safavid trade with Europeans see R.W. Ferrier 'Trade from the mid-14th Century to the End of the Safavid Period' in *The Cambridge History of Iran* VI, *The Timurid and Safavid Periods*, ed. Peter Jackson and Laurence Lockhart, Cambridge 1986.
35. India Office Archives. *Calender* X, no. 1159.
36. *Chronicle of the Carmelites.*
37. Tadeusz Mankowski, 'Some Documents from Polish Sources relating to Carpet Making in the time of Shah 'Abbas I. in A.U. Pope, *Survey of Persian Art* III.
38. Wilhelm and Kühnel von Bode, *Ernst, Antique Rugs from the Near East*, 4th revised edition translated by Charles Grant Ellis, Berlin 1958.
39. This pair are now in the Metropolitan Museum of Art, New York. Donald King, 'The Doria Polonaise Carpet', in *Persian and Mughal Art*, P. and D. Colnaghi and Co. Ltd., London 1976.
40. See also Friedrich Spuhler, *Islamic Carpets and Textiles in the Keir Collection*, London 1978.
41. J. Chardin, *Voyages.*
42. Charles Grant Ellis, 'Some Compartment Designs for Carpets and Herat', *Textile Museum Journal* I, no. 4, December 1965, Washington D.C. In Ellis, Oriental Carpets in the Philadelphia Museum of Art, Philadelphia 1988 nos. S1 and S2, such carpets are attributed to Kurdistān or the Hamadān district.
43. For a more detailed discussion, see J. Housego, '18th-Century Carpets'.
44. Giovanni Curatola, 'Kalat-i Nadiri. Note sul 'Barocco Indo-Persiano', in *Quaderni del Seminario di Iranistica, Uralo-Altaistica e Caucasologia dell'Universita degli Studi de Venezia* XXI, 1983.
45. I am indebted to Yolande Crowe for pointing this out.
46. John Irwin, *The Kashmir Shawl*, Victoria and Albert Museum Monograph, HMSO, London 1973.
47. Samuel Manestry, and Harford Jones, Report on the British Trade with Persia and Arabia, East India Factory Records, Basra 1790.
48. George N. Curzon, *Persia and the Persian Question*, 2 vols., London 1966.
49. H.P. Seymour, who edited the English edition of J.P. Ferrier, *Caravan Journeys*, London 1857.
50. C. Edwards, *The Persian Carpet*, London 1953.
51. This is illustrated in the catalogue of C.I.N.O.A. at the Metropolitan Museum, New York, October 1974–January 1975.
52. For discussion of the revival see Edwards: *The Persian Carpet* and also Jenny Housego, 'The 19th-Century Persian Carpet Boom', in *Oriental Art* XIX, no. 2, Summer 1973.
53. G. Curzon, *Persia and the Persian Question* II.
54. Richard Tapper, *Pasture and Politics, Economics, Conflict and Ritual among the Shahsevan Nomads of North-Western Iran*, London, New York, Toronto, Sydney and San Francisco, 1979.
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Freidrich Spuhler, *Islamic Carpets and Textiles in the Keir Collection*, London 1978.
Parviz Tanavoli, *Shahsavan, Iranian Ruqo and Textiles*, New York 1985.
Jon Thompson, *Carpet Magic, The Art of Carpets from the Tents, Cottages and Workshops of Asia*, London 1983.
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Whitworth Art Gallery, Manchester *The Qashqa'i of Iran*, Exhibition Catalogue, 1976

9

TEXTILES

The following are abbreviations used within this chapter's notes.

BGA	*Bibliotheca Geographorum Arabicorum*, Leiden 1876.
Bib. Nat.	Bibliothèque Nationale, Paris.
Bier	C. Bier, ed., *Woven From the Soul, Spun From the Heart*, Washington D.C. 1987.
CIETA *Bull.*	Centre International d'Étude des Textiles Anciens, *Bulletin de Liaison*, Lyon.
Hayward	Arts Council, London, Hayward Gallery, *The Arts of Islam*, London 1976.
Herrmann	G. Herrmann, *The Iranian Revival*, London 1977.
Los Angeles	Los Angeles County Museum, *Woven Treasures of Persian Art: Persian Textiles from the 6th to 19th Century*, Los Angeles 1959.
ROM	Royal Ontario Museum, Toronto.
Serjeant	R.B. Serjeant, *Material For a History of Islamic Textiles up to the Mongol Conquest*, Beirut 1972.
Spuhler	F. Spuhler, *Islamic Carpets and Textiles in the Keir Collection*, London 1976.
Survey	A.U. Pope, ed., *A Survey of Persian Art*, Oxford/New York, 1938.
TMJ	*Textile Museum Journal*
V. & A.	Victoria and Albert Museum, London.
Welch	S.C. Welch, *Royal Persian Manuscripts*, London 1978.

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1. Xenophon, *Cyropaedia*, tr. W. Miller, New York/London, 1914, VIII, iii, pp. 13–14.
2. Herodotus, *The Histories*, tr. A. de Selincourt, London 1954, VII, pp. 65–66, 86.
3. Ammianus Marcellinus, *Rerum Gestarum*, London 1950, XXIII.6.84.
4. Paris, Musée du Louvre, and on loan to the British Museum, London (B.M.132525).
5. Leningrad, The Hermitage, pub. S.I. Rudenko, *Frozen Tombs of Siberia: The Pazyryk Burials of Iron Age Horsemen*, tr. M.W. Thompson, London 1970, fig. 140, p. 298. In A.A. Gavrilova's reconstruction of this and two other tapestry patterns, the lions formed vertical rows of a large hanging, with geometric ornament and women in pairs at either side of an altar, a rare occurence of women in surviving Achaemenid art. In British Museum, *Frozen Tombs: The Culture and Art of the Ancient Tribes of Siberia*, London 1978, p. 26.
6. Ali Sami, *Persepolis*, tr. R. Sharp, Shīrāz, 7th ed., 1972, pp. 42, 92.
7. A. Geijer, 'An Iranian Riding Coat Reconstructed', CIETA *Bull.* XXVII, Jan. 1968, pp. 22–5.
8. Except those worn by Bahrām II (AD 276/93), Narseh (AD 293/303), and Hurmuzd II (AD 303/9), which appear to be drapery.
9. Tha'ālibī states: 'Shāpūr Dhu 'l-Aktaf fell upon the inhabitants of Sinjār, Busrā, Tuwāna and Āmid and took a great many prisoners, some of whom he established at Tustar, some at Sūs, making them become weavers of brocade and khazz silk there'. *Histoire der Rois des Perses*, ed. and tr. H. Zotenberg, Paris 1900, p. 530. Other accounts by Yāqūt, Qazvīnī and Mas'ūdī, quoted Serjeant, pp. 41–4. It is unclear whether the king named is Shāpūr I (AD 241/72) or Shāpūr II (AD 309/79) For the Sasanian inscription see R.N. Frye, *The Heritage of Persia*, London 1962, p. 213. Frye considers this to be Shāpūr I's second campaign, *c.*AD 256.
10. A fortified Parthian site near the Zagros Gates, on the Silk Route. See Herrmann, p. 72; see also E.J. Keall, 'Qal'eh Yazdigird: the Question of its Date', *Iran* XV, 1977, pp. 1–9 and pl. 11a.
11. The saina bird, *Sāenō menyō* of earlier Pahlavi texts is the *senmurv* of the *Zend Avesta*. As the *sīmurgh*, eg. *thirty birds* it became a poetic symbol in later ages, in different physical form but always benevolent.
12. This piece is in the V. & A. no. 8579.1863. The Paris fragment is in the Musée des Arts Decoratifs, ill. Herrmann, p. 11.
13. Rheims Cathedral. This has a red ground, the St Leu fragments are on blue.
14. Each repeat measures 17 × 20 cm. A.A. Yerussalimskaya, 'A Newly-Discovered "Sasanian' Silk with the Senmurv Pattern', in Russian with English summary, *Soobchtheniya Gosudarstvennovo Ermitazha* XXXIV, Leningrad 1972, pp. 11–15, and K. Riboud, 'A Newly-Excavated Caftan from the Northern Caucasus', TMJ. 4.3.1976, pp. 21–42.
15. M.W. Meister, 'The Pearl Roundel in Chinese Textile Design', *Ars Orientalis* VIII, 1970, pp. 255–67, uses Sasanian-style textiles of the 1st to 2nd/7th to 8th centuries as comparison.
16. On the 'Cup of Khusrau', Bib. Nat., ill. Herrmann, p. 124.
17. In the Sancta Sanctorum, Vatican., ill. W.F. Volbach, *Early Decorative Textiles*, London 1969, pl. 24, p. 54.
18. A Pahlavi text on the Creation, written down in the 2nd/8th century AD.
19. Both in Lyon, Musée Historique des Tissus. The horse ill. R. Tuchscherer and G. Vial, *Le Musée Historique des Tissus de Lyon*, Lyon 1977, pl. 10. On a coin of Bahrām II (AD 273/96), the headdresses of the Queen and heir are crowned with protomes of *senmurv*, boar, lion, horse and bird. V.G. Lukonin, *Persia II, Archaeologia Mundi*, 1967.
20. In 1915, now in the National Museum of New Delhi, Astana, Turfan, is in Sinkiang province. See K. Riboud, 'Some Remarks on the Face-covers (fu-mien), Discovered in the Tombs of Astana', *Oriental Art* XXIII.4., Winter 1977, ill. fig. 12, p. 449.
21. P.O. Harper, *The Royal Hunter: Art of the Sasanian Empire*, New York 1978.
22. See R.B. Serjeant, *Islamic Textiles: Material For a History Up To the Mongol Conquest*, Beirut 1972, pp. 10–11. This work is an invaluable source for Arab authors.
23. Ibn Hauqal, *Viae et Regna . . . Descriptio Ditionis Moslemicae*, ed. M.J. de Goeje, Leiden 1873, II, p. 212. Quoted Serjeant, p. 50.
24. Maqrīzī, *Khiṭaṭ* I, p. 416. Quoted Serjeant, p. 159.
25. Washington D.C., Textile Museum, no. 73.524. Ill. E. Kuhnel and L. Bellinger, *Catalogue of Dated Tiraz Fabrics*, Washington 1952, pl. 1, and P.O. Harper, *The Royal Hunter*, no. 62, p. 138. There are distinct differences between Egyptian tapestry and that woven in the Eastern Caliphate.
26. 298/910–11. Washington D.C., Textile Museum, no. 73.674. Ill. E. Kuhnel and L. Bellinger, *Catalogue of Dated Tiraz Fabrics*, pl. XII, p. 20. Technical problems in the embroidery of inscriptions by craftsmen who may have been illiterate present difficulties for modern epigraphists, and not all readings are agreed. Generally, Egyptian pieces are on linen, those of Mesopotamia and Persia on cotton or *mulḥam*.
27. The present colours of black with gold inscriptions were not standardised until the 6th/12th century, by which time the *Kiswa* came most often from Fatimid Egypt or the Yemen.
28. *Pilgrim Caravan* from a copy of Ḥarīrī's *Maqāmāt*, Baghdad, 635/1237. Bib. Nat.
29. From a reliquary of St Josse at St Josse-sur-Mer, Pas de Calais, now in Paris, Musée du Louvre, no. 7502. M. Bernus, H. Marchal and G. Vial, 'Le Suave de Saint Josse', CIETA *Bull.* XXXIII, 1971, and Hayward, no. 4.
30. Russian excavations at Pjandzikent, Varaksha and Balalyk Tepe, see T. Talbot-Rice, *Ancient Arts of Central Asia*, London 1965, pls. 80, 87, 96, 98. For the Afrāsiyāb fresco, see K. Riboud, 'A Newly-Discovered Caftan . . .', pl. 14a, p. 35.
31. Possibly from the relics of St Amon in the Cathedral of Toul, now in the Musée Historique de Lorrain, Nancy, no. 95.1584. See D.G. Shepherd and W.B. Henning, 'Zandanijī identified' in *Aus der Weltder islamische Kunst, Festschrift fur Ernst Kuhnel*, Berlin 1959, pp. 15–40.
32. The Tehran newspaper *Satāreh-i Īrān* between January and March, 1925, reported excavations over a wide area at Rayy, by that time a village-suburb of Tehran, among Buyid and Saljūq tombs at Naqqāreh Khāneh hill, and the so-called Bībī-Shāhbānū.
33. The Daylamite practice of placing rich fabrics over coffins is attested by Arab authors, who mention the 'extravagance of the Daylamites lamenting for their dead'. See Minorsky, *Encyclopaedia of Islam*, 2nd ed., vol. 2, Leiden 1965, p. 193.
34. M.F. Lemberg, 'The Buyid Silks of the Abegg Foundation, Berne', CIETA *Bull.* XXXVII.1,1973.
35. D.G. Shepherd, 'Medieval Persian Silks in Fact and Fancy (a Refutation of the Riggesberg Report), CIETA *Bull.* XXXIX,1,1974, M.F. Lemberg's reply, in the same, and Shepherd, 'The Archaeology of Buyid Textiles,' in I. Emery Roundtable on Museum Textiles, *Proceedings*, Washington D.C., Textile Museum, 1974.
36. However, by 375/985 it lay in ruins. Maqdisī, *Descriptio imperii moslemici*; ed. M.J. de Goeje, *BGA*, III, p. 431. Quoted Serjeant, p. 51.
37. Ibn al-Faqīh, *Compendium Libri Kitāb al-Boldān*, ed. M.J. de Goeje, *BGA*, V, 1885, pp. 235–54. Quoted Serjeant, p. 82.
38. Tha'ālibī, *Latā'if al-Ma'ārif*, ed. P. de Jong, Leiden 1867, p. 132, and Ibn al-Faqīh, *Compendium*, pp. 270–1, quoted Serjeant, p. 220.
39. Washington D.C., Textile Museum, no. 3.116. ill. *Survey*, III, pp. 2009, 2031, no. 12, and Hayward, no. 5. Bahā al-Daula ruled Mesopotamia and part of Persia from Baghdad 379–403/989–1012.
40. A compound twill, Cleveland Museum of Art, no. 55.52. Ill. Los Angeles, no. 11. An inscription reads:

    > 'Death is a door through which all the world must pass./I should very much like to know the abode after having passed this door./It will be eternal paradise if you have acted according to the desire of God./But if you have been lacking it will be hell.'

    (From a poem by Abū'l-'Atahiya).
41. Cleveland Museum of Art, no. 62.264. D.G. Shepherd, 'Three Textiles from Rayy', Cleveland Museum of Art, *Bulletin* 1, 1963; Hayward, no. 75.
42. Anatolian evidence rests chiefly on a crimson compound twill with gilt roundels enclosing pairs of addorsed lions, and an inscription band which reads that the silk was made for Sulṭān 'Alā al-Dīn Kaykubād (617–35/ 1220–37). Now in Lyon, Musée Historique des Tissus, J.M. Tuchscherer and G. Vial, *Le Musée Historique*, no. 17.
43. Ya'qūbī, *Kitāb al-Boldān*, tr. M.J. de Goeje, *BGA*, 1892, VII, p. 295. Quoted Serjeant, p. 219.
44. Ibn Khaldūn, *Prolégomènes Historiques*, ed. M. de Slane, Paris 1862–8, I, p. 61, quoted Serjeant, p. 8.
45. An inscribed band ill. G.E. Bunt, *Persian Fabrics*, Leigh-on-Sea 1963, pl. 12.
46. In a Kuwaiti private collection, no. 1/524. *Louisiana Revy*, no. 64, ill. p. 28; HALI, XXXV, 1987, p. 52.
47. A compound cloth, possibly from Rayy, Washington Textile Museum, no. 3.212. *Survey*, III, pp. 2015, 2035, no. 28, and VI, pl. 994; Los Angeles, no. 19, ill. p. 35.

48. Los Angeles County Museum, no. P.312.58-1. A *naskhī* inscription reads:

> My God, you see my plight and need and poverty,/ and you hear my suppressed application'

attributed to 'Alī ibn Abī Ṭālib. Los Angeles, no. 30. See also E. Baer, *Sphinxes and Harpies in Medieval Art*, Jerusalem 1965, p. 56.

49. But see A.E. Wardwell, 'Silk and Gold/Silver Textiles from the late Mongol to early Timurid Period from Central Asia and the Near East', *Islamic Art*, 1988.
50. See L.K. Steinman, 'Sericulture and Silk: Production, Trade and Export under Shah Abbas', Bier, pp. 12–19.
51. J-B Tavernier, *Les Six Voyages*, Paris 1679, I, p. 57.
52. J. Chardin, *Les Voyages du Chevalier Chardin*, ed. L. Langlés, Paris 1811, VI, p. 189.
53. Ibn al-Faqīh, *Compendium*, V, p. 267. Quoted Serjeant, p. 83.
54. R.W. Ferrier, 'An English View of Persian Trade in 1618', *Journal of the Economic and Social History of the Orient* XIX, part II, pp. 182–214. Wool broadcloth was a major European import into Persia.
55. C. le Bruyn, *Travels into Muscovy , Persia and Part of the East Indies*, London 1737, I, p. 229. A velvet cope with the Crucifixion, in the V. & A., was probably woven by Isfahānī Armenians. See I. Bennett, 'The Marcy Indjoudjian cope', HALI XXXV, 1987, pp. 22–3.
56. A tulip-shaped turban, usually white, wound round a stiff cap, *tāj*, the top of which projected above the turban.
57. See also B. Schmitz, 'On a Special Hat Introduced during the Reign of Shah Abbas the Great', *Iran* XXII, 1984, pp. 103–112.
58. *Firdawsi Approaching the Three Court Poets of Ghazna*, *c.*984–5/1576–7, from a copy of the *Shāh namēh*, Colnaghi, London, *Persian and Mughal Art*, 1976, XIX.iii.
59. He renounces Islam for the love of a beautiful Christian girl. Attributed to Shaykh Zādeh. Bib. Nat. supp. turc. 316, folio 169 recto. Ill. Welch, pl. 11, p. 54.
60. *Worldly and Otherworldly Drunkenness*, from the *Dīvān* of Ḥāfiẓ, unknown artist, *c.*933/1527, Fogg Art Museum, Harvard University, folio 16.77. recto, Ill. Welch, pl. 18, p. 68.
61. *Dancing Dervishes*, from a ms. of the *Dīvān* of Ḥāfiẓ, Herat 896/1490, New York, Metropolitan Museum of Art. Ill. B. Lewis, ed., *The World of Islam*, 129.1.
62. For example, *Barbad Playing Music to Khusrau*, attributed to Mīrzā 'Alī, from a ms. *Khamseh* of Niẓāmī, 946–50/1539–43, London, British Museum, OR.2265, folio 77 verso. Ill. Welch, pls. 26 27, pp. 85, 87.
63. *Iskandar's Portrait Prepared for Queen Qaidafeh*, by Muhammad Qasim, 1058/1648, ms. Holmes 151 (*Shāh-namēh*) Royal Library, Windsor Castle. Ill. J.A. Boyle, ed., *Persia: History and Heritage*, London 1978, pl. p. 81.
64. *Majnūn Brought by an Old Woman to Laylā's Tent*, from Niẓāmī's *Khamseh*, attributed to Mīr Sayyid 'Alī. London, British Museum, OR2265, folio 157 verso. Ill. Welch, pls. 28, 29, pp. 89, 91.
65. Xenophon, *Cyropaedia*, VIII.iii, pp. 13–14.
66. S.I. Rudenko, *Frozen Tombs*, pp. 86–8, 91–2, figs. 32, 33, pl. 155a.
67. See V. Gervers-Molnár, 'The Hungarian Szür: an Archaic Mantle of Eurasian Origin', ROM, *History, Technology and Art, Monograph 1*, 1973.
68. Tavernier, *Les Six Voyages*, II, p. 53.
69. T. Herbert, *Travels in Persia*, p. 78.
70. J. Chardin, *Les Voyages*, London 1927, p. 161.
71. See note 58.
72. According to Hesychius, Achaemenid kings used tents and 'round awnings', quoted E.G. Smith, *The Dome: A Study in the History of Ideas*, Princeton 1950, pp. 81–2.
73. From the *Dīvān* of Ahmed Pasha, mid 10th/16th century, Bib. Nat. Ill. C.J. Du Ruy, *Art of Islam*, New York 1970, p. 187.
74. Probably from a copy of Niẓāmī's *Khamseh*, Tabrīz, Fogg Art Museum, Harvard University, Camb. Mass. Ill. E. Grube, *The World of Islam*, London 1966, p. 127.
75. R.G. de Clavijo, *Embassy to Tamerlane*, tr. G. le Strange, London 1928, pp. 238–9. Reconstructed by D.N. Wilber, 'The Timurid Court: Life in Gardens and Tents', *Iran* XVII, 1979, pp. 132–3.
76. R.G. de Clavijo, *Embassy*, p. 240.
77. From a copy of Jāmī's *Haft Aurang*, Mashhad, 963–973/1556–65. Washington D.C., Freer Gallery of Art, 4612, 253 recto. Ill. Welch, pls. 46, 47, pp. 122, 125.
78. Five great Turkish military tents were captured by the Polish King Jan III Sobieski and his commanders, at the battle of Vienna, 1094/1683, now at Wawel Castle, Krakow.
79. Roof consists of one loom-width and four other pieces, joined. Boston Museum of Fine Arts, no. 28.13. G. Townsend, 'A Persian Velvet', Boston Museum of Fine Arts *Bulletin* XXVI, April 1928, pp. 24–9; Hayward, no. 73, Bier, no. 30.
80. Chardin mentions the use of trained lions, leopards and panthers for hunting, *Les Voyages*, p. 181. The musket was introduced into Persia during Shāh Ṭahmāsp's reign, see T. Herbert, *Travels*, p. 235.
81. Los Angeles, no. 71; Washington D.C., Textile Museum, nos. 3.317, 3.310, Bier, nos. 31, 32.
82. The dragon-slayer was identified as Iskandar by P. Ackerman, though without firm evidence. New York, Metropolitan Museum, Los Angeles, no. 72; Keir collection, Spuhler, no. 94; Washington D.C., Textile Museum, 3.315, 3.123, 3.309, Bier, nos. 33, 60, 61.
83. Two pieces in the Keir collection, Spuhler, no. 96, 96b. See note 93.
84. These fragments, owned by the Polish Sanguzsko family until 1920, were traditionally said to have been captured at Vienna in 1094/1683 from Karā Muṣṭafā Pasha, the Ottoman vizier and Commander-in-Chief. How they came into Turkish hands is unknown, for they are of too late a date to have been captured in north-west Persia by Süleymān the Magnificent in 950–2/1543–5, as another tradition suggests. It is much smaller than the Turkish tents. A forthcoming Polish study on the Turkish tents at Wawel may throw light on this problem.
85. Lampas, part of a cope, Washington D.C., Textile Museum no. 3.184, Bier, no. 37. Other pieces in the V. & A., and the Benaki Museum, Athens.
86. Keir collection, Spuhler, no. 101, ill. p. 179.
87. New York, Metropolitan Museum. Ill. E. Grube, *The World of Islam*, p. 150. The early Safavids defeated Uzbek and Türkmen tribes, see A. Welch, *Shah Abbas and the Arts of Isfahan*, New York 1973. These prisoners are unlikely to be Türkmen, as the men of these tribes never wore patterned clothes.
88. Spuhler, no. 102, 102a, ill. 180, 181.
89. E. Yarshater, 'The Theme of Wine Drinking and the Concept of the Beloved', *Studia Islamica*, VIII, 1960, pp. 43–5. Lampas, V. & A. ill. *Brief Guide to the Persian Woven Fabrics*, 1937, pl. IV; Washington D.C., Textile Museum, 3.306, Bier, no. 1; Cleveland Museum of Art, 24.743, Los Angeles, no. 56.
90. Lampas, Whitworth Art Gallery, University of Manchester, no. 8276, London, *International Exhibition of Persian Art*, 1931. Other pieces Keir collection, Lyon.
91. Plainweave double cloth, Washington D.C., Textile Museum, 1969,36.1, Bier, no. 26, and V. & A. 916.1897, Hayward, no. 77.
92. Lampas, Washington D.C., Textile Museum, 3.312, Bier, no. 27. On another inscribed lampas Layla's camel is led by a manservant, and her long empty sleeve hangs over the *howdāh*. New York, Cooper Hewitt Museum, 1902.1.780, Los Angeles, no. 58.
93. He was described as *naqshband:* painter/embroiderer. See P. Ackerman, 'A Biography of Giyath the Weaver', *American Institute for Persian Art and Archaeology* VII, Dec. 1934, pp. 9–13, and *Survey*, p. 2094. The shāh's proficiency in a number of crafts, including weaving, is reported by Pietro della Valle, W. Blunt, *Pietro's Pilgrimage, A Journey to India and Back, at the Beginning of the Seventeenth Century*, London 1953, p. 151.
94. Cleveland Museum of Art, no. 44.239. G. Underhill, 'A Shah Tahmasp Velvet' Cleveland Museum of Art *Bulletin* XXXI, Nov. 1944, p. 157; Los Angeles, no. 53; Hayward, no. 72; Bier, no. 35. Other pieces in Lyon, Boston, New York and Düsseldorf.
95. Washington D.C., Textile Museum, 3.224. *Survey* V, p. 2099, XI, fig. 679a, b; Bier, no. 9.
96. A closely similar hanging on a crimson ground in Lyon, Musée Historique des Tissus, 29.52, Hayward, no. 79; HALI XXXII, 1986, 48.
97. Narrow width about 57 cm., ROM, no. 962.60.1, Hayward, no. 83; Keir collection, Spuhler, no. 107, p. 187. Wider width *c.*240 cm. New York, Cooper Hewitt Museum, Bier, no. 2, Keir collection, Spuhler, no. 108, pp. 184, 188–9. Other pieces in Toronto, New Delhi, Krakow and Copenhagen.
98. Keir collection, no. 107. Spuhler, no. 187, ill. p. 183.
99. Rosenborg Castle, Copenhagen, no. 24.17. Among gifts of an embassy from Shāh Ṣafī I to Prince Friedrich von Holstein at Gottorp in 1049/1649, later on the walls of the Royal apartments at Rosenborg. *Louisiana Revy*, 27.3.1987, no. 232, ill. p. 112.
100. Washington D.C., Textile Museum 3.320. Bier, no. 10.
101. Stockholm, Royal Armoury, no. 3414. Stockholm, Nationalmuseum, *Queen Christina of Sweden*, 1966; Hayward, no. 84.
102. Marco Polo, *Travels*, tr. R. Latham, Harmondsworth 1958, p. 32.
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116. M.E. Burkett, *The Art of the Felt Maker*, Kendal 1979, nos. 27, 28, ill. p. 58, pl. 4a, 5b.
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METALWORK

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5. Dust Muḥammad, as quoted BWG, p. 186; compare *CP*, p. 347.
6. Mīrzā Muḥammad Ḥaydar Dughlat, cousin of the Timurid Bābur Mīrzā, founder of the Mughal dynasty in India, as quoted by Arnold in BWG, p. 190; compare *CP*, p. 361.
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As for scholarly publications, many manuscripts have been briefly noted in monographs over the past sixty years, and a far smaller number of manuscripts, mostly of the 9th/15th century, have been more completely published. But comprehensive and fully illustrated articles on specific manuscripts, paintings, or schools of painting are rarer, although they, too, are becoming more frequent. As we note in the beginning of our chapter, the time is fast approaching for a comprehensive history of Persian painting to be written.

In this volume devoted to all the arts of Persia, complete references to all such literature would swamp the reader, and in this chapter, therefore, we have decided to dispense with the classical critical apparatus. Instead, we have compiled the following bibliography broken down into categories that are intended to guide interested readers in their quest for more information. In most cases, the listing is arranged by date of publication rather than in alphabetical order, with the exception of the section on specific periods where the arrangement is chronological.

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NOTES

1. See Wolfgang Born, 'A Lacquer Painted Canteen', *Ars Islamica*, new edition, New York, H.P. Kraus Corporation, 1968, XV–VII, 1951, p. 138; Ernst Grube, 'A Lacquer Panel Painting from the Collection of Lester Wolfe in the Museum of the University of Notre Dame', in *Orientalia Hispanica*, Leyden, E.J. Brill, 1974, 1, part 1, pp. 380–2; and Geza Fehervari, 'A Seventeenth-Century Persian Lacquer Door and Some Problems of Safavid Lacquer-Painted Doors', in *Bulletin of the School of Oriental and African Studies*, London University, XXXII, 1969, pp. 273–4.
2. See René d'Allemagne, *Du Khorassan au Pays des Bakhtiaris*, Paris 1911, IV, p. 100, for comments on ceramic forgeries; Ali Karimi, 'Lacquerwork' in *A Survey of Persian Handicrafts*, Tehran, New York, London, Ashiya Japan, 1977, p. 379, for examples of good modern imitations of Safavid Art and Ernst Grube, 'Traditionalism or Forgery; Lacquered Painting in 19th Century Iran' in William Watson, (ed.) *Lacquerwork in Asia and Beyond*, Percival David Foundation, London 1982, pp. 277–300.
3. In the Topkapı Sarayı Museum in Istanbul. For a description of this collection see Kemal M. Cig, 'The Iranian Lacquer Technique Works in the Topkapı Sarayı Museum' in *Vth International Congress of Iranian Art and Archeology*. Tehran-Iṣfahān-Shīrāz. 11th/18th April, 1968. *The Memorial Volume*. Tehran, Iran, Special Publication of the Ministry of Culture and Arts, 1973, II, pp. 24–34.
4. G. Fehervari, *Persian Lacquer Door*, pl. VI, reproduces a 10th/16th-century painting which includes a painted door, and argues for the early dating of many doors now extant in Western museums; that varnished painting was used in wooden architectural decoration in the Safavid period seems acceptable, but whether any of the extant pieces are genuine examples of this style is still not satisfactorily resolved.
5. A.A. Ivanov, T.B. Grek, and O.F. Akimushkin, *Album Indiskikh i Persi dskikh Miniatur XVI–XVIII v.*, Album of Indian and Persian Miniatures, 16th/18th centuries, Moscow 1962, pl. 92.
6. See Hans Wulff, *The Traditional Crafts of Persia; their Development, Technology and Influence on Eastern and Western Civilizations*, Cambridge, Mass., the M.I.T. Press, 1966, pp. 283–9; Tāherzāde Behzad, 'The Technique of Lacquer Painting', in *A Survey of Persian Art from Prehistoric Times to the Present*, edited by Arthur Upham Pope, Oxford 1939, III, pp. 1926–7; Emil Gratzl, 'Book Covers', in Pope, *Survey* III, pp. 1984–6; 'Alī Karīmī, 'Lacquerwork', in *A Survey of Persian Handicrafts*, Tehran, New York, London, Ashiya Japan, 1977, pp. 378–83; and A.S. Melikiān-Shirvāni, 'Objets Peints d'Iran', in *Encyclopédie Connaissance des Arts*, Art Iranien I, no. 302, Paris 1977, p. 108.
7. There are a small number of possible exceptions to this point: one is a penbox signed Mu'īn Muṣavvar, reproduced in: *Objets d'art d'orient et d'extrême orient*, Sales Catalogue, Hotel Drouot, Paris, 9th and 10th of November 1977, no. 223; another is an unpublished penbox attributed to the same artist, whose whereabouts were communicated to me orally by Mr B.W. Robinson.
8. In the Decorative Arts Museum in Tehran. For an illustration of this 'tondo' see, Yahya Zokā, 'Muhammad-Zamān', in *Nigāhi bi Nigārgari-i Īrān dar Sadeh-hā-yi Darāzdahum va Sīzdahum* (A Survey of Iranian Painting of the 12th and 13th Centuries Hijra). In Farsi. Tehran 1974, pl. 17. For the visit to Majnun see Welch, *Shan Abbas and the Arts of Isfahan*, Asia Society, New York 1973, pl. 71.
9. In the Īrān-Bāstān Museum. For an illustration of these penboxes see Châhriar Adle, *L'Ecriture de l'union, reflets du temps des troubles, oeuvre picturale de Haji Muhammad, 1083–1124 to 1673–1712*, Paris 1980, pls. 8 and 28.
10. For further discussion of these artists and their milieu, see: Layla S. Diba 'Persian Painting in the 18th Century: Tradition and Transmission', paper presented at a Symposium on The Art and Culture of Qājār Iran, held at the Brooklyn Museum, 4 April 1987; to be published in a forthcoming issue of *Muqarnas; ibid. Persian Lacquerwork of the 17th and 18th Centuries and its Role in the Development of Later Persian Painting*, Doctoral Dissertation for New York University in progress.
11. In the Royal Collection of Niyāvarān, Tehran. For an illustration of this penbox see Melikian-Shirvani, 'Objets Peints', pl. 3.
12. Ivanov, et al., *Album Indiskikh*, plates 1, 2 and colour reproduction on inside flap of binding.
13. The small circular box was formerly in the Nigāristān Museum (77.3.20); The casket cover is in the Victoria and Albert Museum, London.
14. Formerly in the Nigāristān Museum no. 77.5.32 For an illustration of this mirror-case in colour see the cover of the *Negarestān Museum Calendar*, Tehran 1977; a black-and-white illustration can be found in Mehdi Mahboubian, *Treasures of Persian Art after Islam*. The Mahboubian Collection, New York 1970, no. 1480, fig. 1480.
15. Examples of this style are an unpublished mirror-case, unsigned and undated in the Nigāristān Museum, no. 75.6.44; a bookbinding again unsigned and undated in the British Library, no. OR. 5302 reproduced in colour in Bernard, Lewis, ed, *Islam and the Arab World*, New York 1976, pl. 32, p. 272.
16. Examples of this style are a chest, unsigned and undated, in the Īrān Bāstān Museum, no. 4384, reproduced in part in: Annamaria Rispoli Fabris, *L'Arte della Lacca*, Milano 1974, p. 22; also a mirror case reproduced in Mahboubian, *Treasures*, no. 1482, pl. 1482.
17. In the Īrān Bāstān Museum. Adle, *L'Ecriture*, fig. 32.
18. For an illustration of this type, see B.W. Robinson, *Persian Drawings from the 14th through the 19th Century*, New York 1965, p. 96, bookbinding by Mihr 'Alī dated 1218/1803-4; and another unsigned and undated bookbinding in Melikiān-Shirvāni, 'Objets Peints'., fig. 7.
19. See B.W. Robinson, '*A Lacquer Mirror Case of 1854*', in *Iran* V, 1967, pp. 1–6.
20. For a detailed analysis of the artistic development of the period in its relationship to the patronage of Nasr al-Dīn Shāh and European influences see Frances Guy Bondurant, *Persian Lacquer Pencases of the Qajar Period*, unpublished M.A. Thesis, New York, Hunter College, 1974, pp. 15–20.
21. See Diba', Persian. Painting', no page number available at press time.
22. See Adle, *L'Ecriture*, pp. 61–4 for further comments on this question.

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———, 'The Near East, the Middle East and India', in *Lacquer: An International History and Illustrated Survey*, Harry N. Abrams, New York, 1984.
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17

CERAMICS

NOTES

1. It is difficult to treat Persian pottery entirely in abstraction from Islamic pottery in general and particularly in abstraction from tile-work, to which we are indebted for the majority of dated pieces upon which a basic chronology can be constructed. And, though the fact has often been ignored, it is difficult to separate Iran from the countries to the East, now Soviet Central Asia and Afghanistan, which over the past thirty years have provided a steadily increasing volume of new material. Comprehensive treatment of this is unsuited to a general survey, but some attempt has been made to keep it in mind. I am grateful for the comments of friends, in particular of Dr Yolande Crowe, Mr Basil Gray, Mrs J.M. Scarce and Dr D.M. Whitehouse, on earlier drafts of this chapter. Comprehensive bibliographies of Persian pottery may be found in, *inter alia*, K.A.C. Creswell, *A Bibliography of the Arts and Crafts of Islam*, American University in Cairo Press 1961; Supplement 1973; E.J. Grube, *Islamic Pottery of the Eighth to the Fifteenth Century in the Keir Collection*, London 1976; and Y. Crowe 'Khazaf' in *Encyclopaedia of Islam'*. Specific references to three essential works, Arthur Lane, *Early Islamic Pottery*, London 1954 and *Later Islamic Pottery*, London 1957, and A. Klein, J. Zick-Nissen and E. Klinge, *Islamische Keramik*, Exhibition Catalogue, Düsseldorf 1973, will not generally be made.
2. Lustre wasters published by M. Bahrami, *Gurgan Faiences*, Cairo 1949 for example, are unconvincing. Grossly misshapen pieces certainly found a market, but scarcely an export market.
3. For Marv see S.B. Lunina, 'Goncharnoye proizvodstvo v Merve X – nachala XIII vv.' in *Keramika Antichnogo i Srednevekovogo Merva* ed. M.E. Masson (*Trudy* Yu-TAKE *XI*), Ashkhabad 1962, pp. 217–418. For Afrāsiyāb see N.B. Nemtseva, 'Stratigrafiya yuzhnoi okrainy gorodishcha Afrasiyab', *Afrasiyab* I, Tashkent 1969, pp. 153–205.
4. G. Reitlinger, 'The Interim Period in Persian Pottery', *Ars Islamica* V/2, 1938, pp. 155–78.
5. R. Schnyder, 'Mediaeval Incised and Carved Wares from North West Iran', in *The Art of Iran and Anatolia from the 11th to the 13th Century* AD ed. W. Watson (Colloquies on Art and Archaeology in Asia No. 4), London 1973 pp. 85–95.
6. A.L. Yakobson 'Khudozhestvennaya keramika Baylakana (Oren-Kale). Po materialam raskopok 1953–55 gg.' in *Trudy Azerbaydzhanskoi (Oren-Kaliinskoi) arkheologicheskoi Ekspeditsii*, Moscow-Leningrad 1959, pp. 228–302. A substantial proportion of these wares were found to bear lightly impressed stamps on the foot, makers' marks, mostly cruciform or arabesque designs or forms of Hercules knot.
7. Z. Maysuradze, *Gruzinskaya Khudozhestvennaya Keramika XI–XIII vv. Angobirovannaya Keramika Dmanisi*, Tbilisi 1954; V. Dzhaparidze, *Keramicheskaya Promyshlennost' Gruzii XI–XIII vv. po arkheologicheskim dannym*, Tbilisi 1956.
8. R. Naumann 'Eine keramische Werkstatt des 13. Jahrhunderts auf dem Takht-i Suleiman' in *Beiträge zur Kunstgeschichte Asiens. In Memoriam Ernst Diez* ed. O. Aslanapa, Istanbul 1963, pp. 301–7.
9. S. Lunina, 'Goncharnoye proizvodstvo', pp. 240–9.
10. Sh. S. Tashkhodzhayev, *Khudozhestvennaya Polivnaya Keramika Samarkanda XI- nachala XIII vv.* Tashkent 1967.
11. M.Y. Kiyani (Jurjān) in *Iran* XI, 1973 p. 196.
12. B.A. Shelkovnikov 'Beloglinyannaya polivnaya keramika Armenii i svidetel'stvo Idrisi', *Sovetskaya Arkheologiya* 1958/1, pp. 214–27. Mention should also be made of fine small footed bowls painted in manganese under a colourless glaze found in some quantity at Ören Kale (A.L. Yakobson, 'Khudozhestvennaya Keramika Baylakana', pp. 273–7; L.T. Gyuzalyan, 'Nadpisi na mestnoi keramike iz Oren-Kale', *Trudy Azerbaydzanskoi (Oren-Kaliinskoi) Arkheologicheskoi Ekspeditsii*, Moscow-Leningrad 1959, pp. 324–50 and especially pp. 326–35). They are characteristically decorated by scratching through the dark slip and are often well inscribed, sometimes with the usual Persian inconsequential quatrains, some signed by a craftsman, Khaṭṭāb. Some fragments have been found at Ganja in Transcaucasia and the presumption is that they are locally produced. They represent one of the very few groups of fine pottery known only from controlled excavation and not represented in Western museum collections.
13. B.A. Shelkovnikov, 'Khudozhestvennaya keramika Dvinskikh raskopok', *Izvestiya Armyanskogo Filiala Akademii Nauk*, Erevan 1940, nos. 4–5.
14. B. Shelkovnikov, 'Beloglinyannaya polivnaya keramika'.
15. The Ghazni lustre finds were partially published in *Ancient Art from Afghanistan*, Exhibition Catalogue, London 1967/8, nos. 87–93, pls. 12a, 13a; J. Auboyer *The Art of Afghanistan*, Feltham 1968, pl. 116. For further brief comments on the finds see 'Summary report on the Italian archaeological mission in Afghanistan, (1) A. Bombaci, 'Introduction to the excavations at Ghazni'; (2) U. Scerrato, 'The two first excavation campaigns at Ghazni, 1957–58', *East and West* NS X, Rome 1959, pp. 3–55. The material, which includes some intact pieces, is mostly of 'Kāshān' type. I owe these references to the kindness of Basil Gray.

    Scerrato points out (pp. 42ff.) that the principal find-spot was a single house where, in addition to the ubiquitous, doubtless locally made, sgraffiato wares with (pseudo-) epigraphic ornament and polychrome staining, lustre-painted bowls and underglaze-painted wares of Kāshān type came to light. The lustre wares seem superficially somewhat distinct from the standard 'Rayy' or 'Kāshān' types; but, *contra* Scerrato (p. 55 note 56), there is no reason for postulating another production centre. The wares are definitely similar to lustre wares ascribed to Gūrgān – the appearance of which almost exclusively in the provinces suggests that it was made at Kāshān at various workshops specialising in mass-produced lustre wares of second rate quality.
16. N.N. Vakturskaya 'Iransky sosud iz Urgencha' in *Poleviye Issledovaniya Khorezmskoi Ekspeditsii v 1957 g.* (Materialy Khorezmskoi Ekspeditsii IV) Moscow 1960 pp. 191–2. See also S.B. Lunina 'O kul'turnykh svyazyakh srednevekovogo Merva' in *Srednyaya Aziya v drevnosti i srednevekov'ye*, ed. B.G. Gafurov and B.A. Litvinsky, Moscow 1977 pp. 126–32.
17. C.K. Wilkinson, *Nishapur. Pottery of the early Islamic Period*, New York 1973, pp. 259–89.
18. S.B. Lunina, 'Goncharnoye proizvodstvo', p. 365.
19. D. Whitehouse and A. Williamson, 'Sasanian Maritime Trade', *Iran* XI, 1973, pp.29–49.
20. A. Caiger-Smith *Tin-glaze Pottery in Europe and the Islamic World, The Tradition of 1000 Years in Maiolica, Faience and Delftware*, London 1973, pp. 22–40.
21. A. Lane, *Early Islamic Pottery*, London 1954.
22. Cf. particularly material in the reserves of the Boston Museum of Fine Arts, St. 12, 62–78 and Shelf 43. Some doubt has been expressed, by Dr G.T. Scanlon, as to whether this material actually is from Fusṭāṭ. Mixed with it there certainly is some undoubted Fusṭāṭ material, however.
23. The evidence is graphically presented by E. Atil, *Ceramics from the World of Islam*. Exhibition Catalogue, Washington DC 1973, for example no.s 72 and 74, the latter dated 676/1277–78 in figures; and the author's review in *Bibliotheca Orientalis* XXXIII/1–2, 1976, p. 92.

24. There is so far no complete publication of the pottery from Pyandzhikent. Meanwhile cf. A.M. Belenitsky, I.B. Bentovich and O.G. Bol'shakov *Srednevekovy Gorod Srednei Azii*, Leningrad 1973.
25. D. Whitehouse and A. Williamson, 'Sasanian Maritime Trade'.
26. A. Lane, 'Glazed relief ware of the 9th century A.D.' *Ars Islamica* VI/1, 1939, pp. 56–65.
27. T. Bianquis, G.T. Scanlon and A. Watson, 'Numismatics and the dating of early Islamic pottery in Egypt' in *Near Eastern Numismatics, Iconography, Epigraphy and History*. Studies in Honor of George C. Miles edited D.K. Kouymjian, Beirut 1974, pp. 163–73.
28. M. Kervran, 'Les Niveaux islamiques du secteur oriental du tépé de l'Apadana. Le Matériel céramique' in *Cahiers de la D.A.F.I.* VII, Paris, 1977, pp. 75–160.
29. Figures in the romance of the Warqa and Gulshāh in the Topkapı Sarayı Library (Hazine 841), the proportions of which are decidedly suggestive of *mīnāī* painting are mostly drawn over outlines scored in the paper, evidently round a template. There is also evidence for the use of a template in the illustrations of the *Kitāb Ṣuwar al-Kawākib al-Thābita* of al-Ṣūfī dated 400/1009 (Bodleian Library Marsh 144), though, curiously, few of the images are mirror images. The possibility was first suggested to me by Dr Filiz Çağman of the Topkapi Saray, to whom I express my gratitude.
30. The most interesting general treatment of mass-production in Islam is R. Ettinghausen's, 'Originality and Conformity in Islamic Art' in *Individualism and Conformity in Classical Islam* edited by Amin Banani and Speros Vryonis Jr., Wiesbaden 1977, pp. 83–114. The slowness of progress in the Persian pottery industry demonstrates its general inefficiency and confirms the general view of Islamic historians that the guilds of potters, whatever their functions may have been, did nothing to control or encourage the quality of production.
31. S.B. Lunina, 'Evolyutsiya tekhniki goncharnogo proizvodstva v srednevekovom Merve' in *Trudy Yuzhno-Turmenistanskoi Arkheologicheskoi Ekspeditsii* (YuTAKE) XV, Ashkhabad 1974 pp. 247–71; 'Formy spetsializatsii v srednevekovom goncharnom remesle Srednei Azii' *Sovetskaya Arkheologiya* 1978/3 pp. 127–37.
32. Sh. S. Tashkhodzhayev, 'Keramicheskaya masterskaya XII- nachala XIII v.' in *Afrasiyab* IV, Tashkent 1975.
33. I. Akhrarov 'K istorii keramicheskogo proizvodstva na gorodischche Afrasiyaba' in *Afrasiyab* I, Tashkent 1969, pp. 301–11.
34. 08.208. From Cairo.
35. See references in Y. Crowe, 'Early Islamic Pottery and China', *Transactions of the Oriental Ceramic Society*, 1975–6, 1976–7, pp. 263–78.
36. See R. Schnyder, 'Mediaeval Incised and Carved Wares' also 'Political centres and artistic powers in Saljūq Iran' in *Islamic Civilisation 950–1150*, ed. D.S. Richards, Oxford 1973 pp. 201–9. The ceramic material from Takht-i Sulaymān has primarily been published in the excavation reports in *Archäologischer Anzeiger* 1962, pp. 633–85; 1964, pp. 1–77 and 1965, pp. 619–715.
37. See A.L. Yakobson, 'Khudozhestvennaya Keramika Baylakana'; Z. Maysuradze *Gruzinskaya Khudozhestvennaya keramika*.
38. Despite an avalanche of excavation reports of Kazakhstan sites since 1970 the best survey of material remains E.V. Sayko, *Istoriya tekhnologii keramicheskogo remesla Srednei Azii VIII–XII vv.*, Dushanbe 1966.
39. Terminus suggested by Marushchenko 'Stary Sarakhs' *Türkmenistanïn Arkheologiyasï boyundzha Materiallar*, Ashkhabad 1956 pp. 161–217. J-C. Gardin, *Lashkari Bazar. II. Les trouvailles. Céramiques et Monnaies de Lashkari Bazar et de Bust*, Paris 1963, p. 96 and pl. 22, no. 371, suggests that a unique find at Bust, a bowl with a (pseudo-) inscription and fine scroll-work was locally produced, though the local kilns produced generally wares of low quality.
40. J. Zick-Nissen, 'Figuren auf mittelalterlich-orientalischen Keramikschalen und die "Sphaera Barbarica"' *Archäologische Mitteilungen aus Iran* NF VIII, 1975, pp. 217–40.
41. By the Iranian Department of Antiquities. M.Y. Kiyani (Jurjan), *Iran* XI, 1973 p. 196 and pl. VIIIa.
42. Wilkinson's earlier dating, to the second half of the 5th/11th century (*Nishapur*) has been disputed by Schnyder, 'Mediaeval incised and carved wares'. Though the numismatic evidence is very difficult to interpret it is perhaps worth mentioning that at Nīshāpūr in one of the shafts of the large kiln were found silver coins of Mas'ūd I of Ghazna (421–32/1030–40) and of the Caliph al-Qā'im (422–67/1031–74). This, however, still fails to resolve when frit wares were first made at Nīshāpūr.
43. Wilkinson, *Nishapur*, pp. 259–89. In addition to the articles by Lunina (see note 3) and Nemtseva (see note 3), see N.N. Vakturskaya 'Khronologicheskaya klassifikatsiya srednevekovoi keramiki Khorezma (IX–XVII vv).' in *Keramika Khorezma*, ed. S.P. Tolstov and M.G. Vorob'yëva (Trudy Khorezmskoi Arkheologo-Etnograficheskoi Ekspeditsii IV), Moscow 1959, pp. 261–342, where the results of extensive surveys did not, apparently, significantly increase the number of sites where frit wares were demonstrably made.
44. V.N. Leviatov, *Keramika Staroi Gandzhi*, Baku 1940; G.M. Akhmedov and F.A. Ibragimov, 'Iranskaya fayansovaya keramika iz raskopok srednevekovykh gorodov Azerbaydzhana' in *Iskusstvo i Arkheologiya Irana. II Vsesoyuznaya Konferentsiya 19–23 noyabrya 1973 goda. Doklady*, Moscow 1976 pp. 29–35; B.A. Shelkovnikov, 'Beloglinyannaya polivnaya Keramika'.
45. The identifications were first proposed by J. Zick-Nissen, 'Sphaera Barbarica', though her suggestion that the Saturn figure is in fact Cepheus (Qīfā'ūs/Qaiqā'ūs) is not totally convincing.
46. The term occurs in Abu'l-Qāsim's treatise of 700/1301. Cf. H. Ritter, J. Ruska F. Sarre, R. Winderlich, *Orientalische Steinbücher und Persische Fayencetechnik*, Istanbuler Mitteilungen III Istanbul 1935; J.W. Allan, 'Abū'l-Qāsim's Treatise on Ceramics' *Iran* XI 1973, pp. 111–20.
47. Cf. a dish signed Muḥammad b. Abi'l-Ḥasan al-Muqrī *Survey of Persian Art*, pl. 705.
48. *Op. cit.* note 23 and the author's review 91.
49. J.W. Allan, 'Abu'l-Qāsim's treatise', p. 115.
50. S.P. Maslenitsina, 'Nachalo novogo perioda srednevekovoi keramiki Irana XIV v.' in *Iskusstvo i Arkheologiya Irana. II Vsesoyuznaya Konferentsiya 19–23 noyabrya 1973 goda. Doklady*, Moscow 1976, pp. 174–31 cites an extraordinary *lājvardīna-mīnāī* hybrid, with a dragon-slayer, perhaps Bahrām Gūr, on the base and *lājvardīna* sides. Moscow, Museum of Oriental Art/Gosudarstvenny Muzei Iskusstva Narodov Vostoka, no. 44.
51. N.M. Bulatov, 'Klassifikatsiya kashinnoi polivnoi keramiki zolotoordynskikh gorodov' *Sovetskaya Arkheologiya*, 1968/4, pp. 95–109, based on material from Saray Berke, Saray Baty and Madzhary. The glaze of a large *lājvardīna* bottle from Saray Berke is spectroscopically similar to the glazes of other undisputedly Golden Horde wares.
52. N.M. Bulatov, 'K voprosu o stanovlenii keramicheskogo remesla v zolotoordynskikh gorodakh', *Vestnik Moskovskogo Universiteta. Seriya Istoriya* 1969/2, pp. 46–59; G.A. Fëdorov-Davydov, *Iskusstvo kochevnikov i Zolotoi Ordy*, Moscow 1976, pp. 122, 125–6, pls. 88–91 and 100. The imitations use enamels applied not on a *cloisonné* ground of dull red enamel but wholesale and use a thickly applied gilding to disguise defects.
53. Boston Museum of Fine Art, St 12, 62–78 and Shelf 43.
54. N.N. Busyatskaya, 'Khudozhestvennoye steklo stran Blizhnego Vostoka na territorii Vostochnoi Evropy X–XIV vv.' *Vestnik Moskovskogo Universiteta. Seriya Istoriya* 1972/II, pp. 88–90. Though little glass reached areas which were far from the main navigable rivers the Volga appears to have played no role.
55. B.A. Shelkovnikov, 'Fayansy, raspisanniye lyustrom po beloi neprozrachnoi glazuri iz Oren-Kala' in *Trudy Azerbadzhanskoi (Oren-Kaliinskoi) Arkheologicheskoi Ekspeditsii*, Moscow-Leningrad 1959, pp. 303–23.
56. For general surveys see Oliver Watson, *Persian Lustre Ware* London 1985 and Alan Caiger Smith, *Lustre Pottery Technique, Tradition and Innovation in Islam and the Western World*, London 1985. G.A. Pugachenkova, 'K otkrytiyu lyustrovoi keramiki Merva XII v.' *Izvestiya Akademii Nauk Turkmenskoi SSR. Seriya Obshchestvennykh Nauk*, 1960/v. She has also suggested (*Iskusstvo Turkmenistana*, Moscow 1967, p. 137) that piles of broken lustre at Dakhistan/Dehistan indicate that lustre was also made there, though these could well be rubbish heaps of broken imports. Though her evidence is inconclusive, E. Atagarriyev ('Srednevekovaya kashinnaya keramika Misriyanskogo oazisa i eë iranskiye paralleli' in *Iskusstvo i Arkheologiya Irana. II Vsesoyuznaya Konferentsiya 19–23 noyabrya 1973 goda. Doklady*, Moscow 1976, pp. 12–18) has concluded that lustre was manufactured along with other types of frit ware at Mashhad-i Misriyyān, in the extreme south of Soviet Turkmenistan and almost on the frontier of Iranian Khurāsān.
57. R. Ettinghausen and G.D. Guest, 'The Iconography of a Kāshān Lustre Plate', *Ars Orientalis* IV, 1961, pp. 25–64.
58. C.K. Wilkinson, *Iranian Ceramics*, New York 1963, no. 54, then in the Nasli M. Heeramaneck collection. Shown twenty years ago in New York.
59. O. Watson, 'Persian Lustre Ware from the 14th to the 19th Centuries', *Le Monde Iranien et l'Islam* III, 1975, pp. 63–80.
60. J.M. Rogers, Review of 'Art Islamique dans les collections privées libanaises' *Kunst des Orients* IX/1–2, 1973–4, p. 173. A possible terminus for the manufacture of these soapy glazed monochrome wares is given by a large storage jar dated 683/1284–5 in the Freer.
61. B. Gray, 'The Export of Chinese Porcelain to the Islamic world. Some Reflections on its Significance for Islamic Art before 1400', *Transactions of the Oriental Ceramics Society*, 1975–6, 1976–7, London 1977, pp. 231–47; also 'Some Chinoiserie Drawings and their Origin' in *Forschungen zur Kunst Asiens. In Memoriam Kurt Erdmann*, ed. O. Aslanapa and R. Naumann, Istanbul 1969, pp. 159–71.
62. M. Medley, *Yuan Porcelain and Stoneware*, London 1974, pp. 73–5.
63. G. Reitlinger, 'The Interim Period'.
64. S.B. Lunina, 'Goncharnoye proizvodstvo', pp. 285–346.
65. G.A. Pugachenkova, 'Master-keramist Mukhammed-Ali Inoyaton iz Merva. K kharakteristike shtampovannoi keramiki Merva XII- nachala XIII v.', *Sovetskaya Arkheologiya*, 1958/2, pp. 78–91. The name of another 6th/12th-century Marv craftsman, Abū Bakr b. Aḥmad has come to light at Samarqand, an indication that Marv unglazed wares, or perhaps just moulds, were exported eastwards. Cf. M.N. Fëdorov, 'Nakhodka keramiki s imenem gonchara XII v. Abu Bekra ibn Akhmeda' *Sovetskaya Arkheologiya*, 1971/2.
66. This is disputed by Wilkinson, *Nishapur*, p. 256.
67. The basic evidence presented by H. Seyrig ('Flacons? grenades? éolipiles?' *Syria* XXXVI, 1959, pp. 81–9) has not been challenged: no alternative hypothesis which might explain the use of more than a minute proportion of those extant has been produced. See the bibliography attached to J.M. Rogers, 'Aeolipiles Again' in *Forschungen zur Kunst Asiens. In Memoriam Kurt Erdmann* ed. O. Aslanapa and R. Naumann, Istanbul 1969, pp. 147–58.
68. N.N. Vakturskaya, 'Keramika Khorezma'.
69. N.M. Bulatov, 'Klassifikatsiya kashinnoi polivnoi keramiki'. The monotony of 'Timurid' wares, all, apparently, inferior imitations of Chinese blue and white porcelains, has never been explained. Most of the material has been presented by G.A. Pugachenkova. 'Tipy khudozhestvennoi keramiki epokhi Timura i Ulugbeka iz raskopok Guri-Mira 1943 g.'; 'Zoomorfniye elementy v timuridskoi keramike Samarkanda'; 'Keramika Samarkanda epokhi Timura i Timuridov v sobraniyakh Samarkandskogo muzeya' all in *Annotatsii v Byulletene Srednеaziatskogo Gosudarstvennogo Universiteta*, SAGU, Tashkent 1945; 'Glazurovannaya keramika Nisy XV-XVI vv.' in *Trudy* YuTAKE I (Ashkhabad 1940), pp. 400–17; and 'Samarkandskaya keramika XV veka' *Trudy* SAGU XI (Tashkent 1950). To judge from the classification of the Novaya Nisa material, what is lacking is a fine chronology: much of the pottery must be late 10th/16th, rather than 9th/15th century.
70. M. Medley, 'Islam, Chinese porcelain and Ardebil', *Iran* XIII, 1975 pp. 31–7.
71. So-called not because it housed Ulugh Beg's porcelain collection but because it was faced with blue and white tiles. For a roughly contemporary tile from the Chīnī-Khāneh, hexagonal, with highly stylised painting of cloud scrolls in cobalt see L.I. Rempel', *Arkhitekturny Ornament Uzbekistana*, Tashkent 1961, fig. 153.
72. In Dahlem, I 5688.
73. A.A. Ivanov's admirable *Kubachi*, Leningrad 1976, deals, unfortunately, only with the stone-carvings of medieval Kubachi and the (later) metalwork industry.

74. *Ma Huan. Ying-yai Sheng-lan. The Overall Survey of the Ocean's Shores (1433)* translated and edited by J.V.G. Mills, Hakluyt Society, Cambridge 1970, p. 168.
75. In the Īrān Bāstān Museum in Tehran, Propyläen Kunstgeschichte. Islam, ed. J. Sourdel-Thomine and B. Spuler, Berlin 1973, no. 402 and bibliography; J.M. Rogers, 'Islamic Art and Design 1500–1700' (British Museum, 1983), pp. 121–40.
76. Y. Crowe, 'A Preliminary Enquiry in Underglaze Decoration of Safavid Wares' in the press.
77. For instance, the 'Gombroon' wares exported via Gombroon/Bandar 'Abbās though not made there.
78. T. Volker, *Porcelain and the Dutch East India Company – A Record of the Dutch Registers between 1602 and 1682,* Leiden 1954.
79. *ibid.*
80. Justi, *Vollständige Abhanlung von den Manufakturen und Fabriken*, Copenhagen 1758).
81. O. Watson, 'Persian Lustre Ware'.
82. This is in the Hetjens Museum in Düsseldorf.
83. I.M. Dzhabbarov, 'Noviye materialy k istorii gon-charnogo remesla Khorezma', in *Keramika Khorezma* ed. S.P. Tolstov and M.G. Vorob'yëva (Trudy Khore-zmskoi Arkheologo-Etnograficheskoi Ekspeditsii IV), Moscow 1959, pp. 379–96.

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TILEWORK

NOTES

1. George Keppel, *Personal Narrative of a Journey from India to England by Bussorah, Bagdad, the ruins of Babylon, Curdistan, the Court of Persia, the Western shore of the Caspian Sea, Astrakhan, Nishney Novgorod, Moscow, and St. Petersburgh in the year 1824*, London 1827, II, p. 158.
2. The present-day tilemaker, Negah Moghadam at Tehran, for example, is a small business but carries out many orders both for restoration and original work.
3. For example the Irantour Hotel, 'Abbāsābād Avenue, Iṣfahān.
4. James W. Allan, 'Abū'l-Qāsim's Treatise on Ceramics', *Iran* 11, 1973, pp. 111–20.
5. Ustad 'Alī Mohamed, *On the manufacture of Modern kashi Earthenware Tiles and Vases in Imitation of the Ancient*, Edinburgh 1888, pp. 11. Also reproduced in W.J. Furnival, *Leadless Decorative Tiles, Faience and Mosaic*, Staffordshire 1904. The present author is currently preparing a new edition of this treatise for publication.
6. Map of Tehran compiled by Soliman Khan under the supervision of Abdul Ghafar Najm al-Mulk, astro-nomer and professor of mathematics at the Dar ul-Funun College Tehran, from surveys made by the students of the college between 1868 and 1888. Litho-graphed at Tehran 1892 (Copy in the Library of the Royal Geographical Society, London, ref. IRAN S28, Pamphlet 418).
7. J. Allan, 'Abū'l-Qasim's Treatise', 4, p. 111.
8. Āqā Makhtuzādeh, for example, a potter and tilemaker still practising in Isfahān informed the author that he obtained quartz pebbles from the Zāyandehrūd river.
9. Ustad 'Alī Mohamed, 'On the Manufacture of Modern Kashi', p. 3.
10. J. Allan, 'Abū'l-Qāsim's treatise', p. 112.
11. Ustad 'Alī Mohamed, 'On the Manufacture of Modern Kashi', p. 5.
12. J. Allan, 'Abū'l-Qāsim's Treatise', p. 112.
13. Ustad 'Alī Mohamed, 'On the Manufacture of Modern Kashi', pp. 3–4.
14. J. Allan, 'Abū'l-Qāsim's Treatise', pp. 113–14.
15. Ustad 'Alī Mohammed, 'On the Manufacture of Modern Kashi', p. 5.
16. J. Allan, 'Abū'l-Qāsim's Treatise', p. 113.
17. Ustad 'Alī Mohammed, 'On the Manufacturing of Modern Kashi', pp. 4–5.
18. *ibid.*, pp. 6–7; J. Allan, 'Abū'l-Qāsim's Treatise' p. 114.
19. J. Allan, 'Abu'l-Qāsim's Treatise', p. 114
20. Ustad 'Alī Mohamed, 'On the Manufacture of Modern Kashi', p. 7.
21. J. Allan, 'Abu'l-Qāsim's Treatise', p. 114.
22. Ustad 'Alī Mohamed, 'On the Manufacture of Modern Kashi', pp. 10–11.
23. One of the earliest known examples is a lustre painted bottle dated 575/1179 (British Museum 1920.3.26.1).
24. For a list of these see Donald N. Wilber, 'The Devel-opment of Mosaic Faience in Islamic Architecture in Iran', *Ars Islamica* VI, 1939, pp. 16–47.
25. Dāmghān, Pīr-i 'Alamdār 418/1027; Chihil Dukhtarān 448/1056.
26. D. Wilber, 'The Development of Mosaic Faience, pp. 31–2.
27. *ibid.*, pp. 33–4.
28. Of the few surviving manuscripts the most notable are the *Kitāb al-Diriyak* 596/1199 Bibliothèque Nationale, Paris, and the *Varqā va Gulshan*, early 7th/13th century, in Topkapı Sarayı Library, Istanbul.
29. See A.U. Pope, *A Survey of Persian Art*, Oxford 1938, II pp. 1675–87 for a list of dated lustre tiles.
30. See also Ernst J. Grube, *Islamic Pottery of the Eighth to the Fifteenth Century in the Keir Collection*, London 1976, p. 232, no. 183.
31. See Geza Fehervari, *Islamic Pottery – a Comprehensive Study Based on the Barlow Collection*, London 1973, p. 99.
32. For a detailed list of buildings and accompanying bibliography see Donald N. Wilber, *The Architecture of Islamic Iran: the Ilkhanid Period*, New York 1955.
33. See Arthur Lane, *Guide to Tiles*, London 1960, p. 7. (Victoria and Albert Museum, London no. 1513–1876).
34. Qum, Imāmzādeh 'Alī ibn Ja'far, lustre *miḥrāb* dated 734/1333 (Now in the Irān Bāstān Museum, Tehrān.) Dāmghān, group of lustre tiles from palace near the Imāmzādeh Ja'far *c.*665/1266 (Now in the Berlin and Louvre Museums.) Varāmīn, Imāmzādeh Yaḥyā, lustre *miḥrāb* dated 663/1265. (Now in the Philadelphia Museum.)
35. A.U. Pope, 'New Examples of Kashan Lustre-Painted Tiles' in 'New Findings in Persian Ceramics of the Islamic Period', *Bulletin of the American Institute for Iranian Art and Archaeology*, V, no. 2, Dec. 1937, pp. 149–69.
36. This manuscript has been published by David Talbot Rice and Basil Gray, *The Illustrations to the 'World History' of Rashid al-Din*, Edinburgh 1976.
37. See Elizabeth and Rudolph Naumann, *Ein Kösk im Sommerpalast des Abaqa Chan auf dem Tacht-i Sulaiman und Seine Dekoration* in O. Aslanapa and R. Naumann, *Forschungen zur Kunst Asiens*, Istanbul 1969, pp. 35–65.
38. For a list of monuments see Derek Hill and Oleg Grabar, *Islamic Architecture and its Decoration*, London 1967 and Sonia and Hans Seherr-Thoss, *Design and Colour in Islamic Architecture*, Washington 1968.
39. See Oliver Watson, 'Persian Lustre Ware from the 14th to the 19th Centuries', Le Monde Iranien et L'Islam III 1975, pp. 68–72.
40. A. Lane, *Guide to Tiles*, p. 11 (Victoria and Albert Museum, London, nos. 1289–92. 1893; 646.1900).
41. For convenient descriptions of Safavid buildings see Seherr-Thoss, *Design and Colour*, and Wilfrid Blunt, *Isfahan Pearl of Persia*, London 1966.
42. Large wall panels waled in *cuerda seca* tiles depicting garden scenes are in the Victoria and Albert Museum, London and the Metropolitan Museum, New York.
43. For descriptions of these churches and their decoration see John Carswell, *New Julfa-Armenia Churches and other Buildings*, Oxford 1968.
44. O. Watson, 'Persian Lustre Wares', pp. 73–6.
45. See Arthur Lane, *Later Islamic Pottery*, 2nd edition, London 1971, pp. 78–81.
46. See Jennifer M. Scarce, *Function and Decoration in Qajar Tilework* in *Islam in the Balkans and Persian Art and Culture of the 18th and 19th Centuries*. Papers arising from a symposium held to celebrate the World of Islam Festival at the Royal Scottish Museum, Edinburgh 29th/30th July 1976, Edinburgh 1979 pp. 75–86.
47. See Jennifer M. Scarce, *The Tile Decoration of the Gulestan Palace at Tehran – an Introductory Survey*. Paper read at the VIIth International Congress of Iranian Art and Archaeology Munich 7th/12th September 1976, Berlin 1979, pp. 635–41.
48. See Jennifer M. Scarce, 'Alī Muhammad Isfahanī – tilemaker of Tehran', *Oriental Art*, New Series, XXII, no. 3, Autumn 1976, pp. 278–88.

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Jennifer M. Scarce, *Function and Decoration in Qajar Tilework* in *Islam in the Balkans and Persian Art and Culture of the 18th/19th Centuries* – papers arising from a symposium held to celebrate the World of Islam Festival at the Royal Scottish Museum, Edinburgh 29/30th July 1976, Edinburgh 1978.
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GLASS

NOTES

1. See *Iran*, Journal of the British Institute for Persian studies, VI, 1968, pp. 18, 19.
2. Dan Barag, 'Mesopotamian Core-Formed Glass vessels . . .' in A. Leo Oppenheim, et al., *Glass and Glassmaking in Ancient Mesopotamia*, Corning, 1970, pp. 132ff.
3. A. von Saldern, 'Other Mesopotamian Glass Vessels (1500/600 BC) in A.L. Oppenheim, pp. 203ff. *Glass*, and also in 'Glass Finds at Gordion', *Journal of Glass Studies (JGS)* I, 1959, pp. 23ff. Andrew Oliver, 'Persian Export Glass', *JGS* XII, 1970, pp. 9ff. A. von

Saldern, 'Achaemenid and Sassanian Cut Glass', *Ars Orientalis* v, 1963, pp. 7ff.

4. Michael Vickers, 'An Achaemenid Glass Bowl in a Dated Context', *JGS* xiv, 1972, pp. 15ff. Also Dan Barag, 'An Unpublished Achemenid Cut Glass Bowl from Nippur', *JGS* x, 1968, pp. 17ff.
5. A. Oliver, 'Persian Export Glass', fig. 10.
6. A. von Saldern, 'Glass Finds at Gordion', fig. 15.
7. Erich F. Schmidt, *Persepolis II*, Chicago 1957, pp. 91–3, 127–32, pls. 66–7.
8. See Poul Fossing, *Glass Vessels before Glass-Blowing*, Copenhagen 1940, pp. 84–5.
9. D.B. Harden, 'Ancient Glass, I: Pre-Roman' and 'II: Roman', *Archaeological Journal* cxxv, 1969, pp. 46 ff. and cxxvi, 1970, pp. 44ff.
10. Christoph W. Clairmont, '*The Glass Vessels*' (*The Excavations at Dura-Europos, Final Report IV*, Part V), New Haven 1973: O.H.-W. Puttrich-Reignard, *Die Glasfunde von Ktesiphon*, Kiel 1934, pp. 11–14. Similar finds were made at Ashur and Nippur, see *ibid.*, p. 11.
11. P. Hamelin, 'Matériaux pour servir à l'étude des verreries de Bégram', *Cahiers de Byrsa* iii, 1953, pp. 121–8, iv, 1954, pp. 153ff.
12. Gladys Davidson Weinberg, 'Hellenistic Glass from Tel Anafa in Upper Galilee', *JGS* xii, 1970, pp. 17ff. and 'Hellenistic Glass Vessels from the Athenian Agora', *Hesperia* xxx, No. 4, 1961, pp. 380ff.
13. See pp. 295 above.
14. See, e.g., Gunnar Ekholm, 'Scandinavian Glass Vessels of Oriental Origin from the 1st to the 6th century', *JGS* v, 1963, pp. 29ff.
15. C. Clairmont, '*The Glass Vessels*', pp. 68ff.
16. Shinji Fukai, *Study of Iranian Art and Archaeology – Glassware and Metalwork*, Tokyo 1968, pp. 7–8.
17. D.B. Harden, 'Glass from Kish', in S. Langdon and D.B. Harden, 'Excavations at Kish and Barghutiat 1933', *Iraq* i, 1934, pp. 131ff.
18. Puttrich-Reignard, *Die Glasfunde*, pp. 39ff.
19. *JGS* viii, 1966, p. 131, No. 14. For the handleless vase-form, see W.C. Braat, 'The Glass Collection of the Rijksmuseum van Oudheden at Leiden', *Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden* xliv, 1963, pp. 111–12, no. 28.
20. G. Ekholm, 'Scandinavian Glass Vessels', pp. 32–4: A. von Saldern, 'Achaemenid and Sassanian', pp. 8–10, fig. 3: W. Braat, 'The Glass Collection', no. 27: also S. Fukai, *Study of Iranian Art*, p. 12.
21. e.g. A. von Saldern, 'Achaemenid and Sassanian', pp. 8–10, pls. 2–3, figs. 4–5: W.C. Braat, 'Three Sassanian Glass Vessels recently acquired by the Museum', *Oudhedkundige Mededelingen* xlv, 1964, pp. 115–16, nos. 1–3.
22. S. Fukai, *Study of Iranian Art*, pp. 10–11: A. von Saldern, 'Achaemenid and Sassanian', pp. 10–12, pls. 4–5, figs. 7–9, 12: D.B. Harden, 'Glass from Kish', p. 132, figs. 4–5, nos. 10–13.
23. C.J. Lamm, 'Les Verres trouvés à Suse', *Syria*, 1931, pp. 360, 365, pl. lxxx, 4.
24. S. Fukai, *Study of Iranian Art*, p. 15.
25. Mariamaddalena Negro Ponzi, 'Sasanian Glassware from Tell Mahuz (North Mesopotamia)', *Mesopotamia* iii-iv, 1968-9, p. 356, No. 68, fig. 157: see also C. Clairmont, '*The Glass Vessels*' pp. 52–3, pl. vi, Nos. 211ff.: S. Fukai, *Study of Iranian Art*, p. 16.
26. M. Negro Ponzi, pp. 356–9, fig. 157, nos. 69–70.
27. D.B. Harden, 'Glass from Kish', p. 134, fig. 5, No. 26: *JGS* viii, 1966, p. 131, No. 15.
28. The best repertory of Persian-found glass is C.J. Lamm, *Glass from Iran in the National Museum, Stockholm*, Stockholm and London, 1935, to be used with the same author's monumental *Mittelalterliche Gläser und Steinschnittarbeiten aus dem Nahen Osten*, Berlin 1929/30 2 vols. (*M.G.*), and his contribution on 'Glass and Hardstone Vessels' to *A Survey of Persian Art*, ed. A.U. Pope. Oxford 1939, iii, pp. 2592–606; vi, pls. 1438–59. For Sāmarrā, see C.J. Lamm, *Das Glas von Samarra*, Berlin 1928 and Iraq Government Department of Antiquities, *Excavations at Samarra 1936–39, ii*, Baghdad 1940, pls. 106–27.
29. Charles K. Wilkinson, 'Water, Ice and Glass', *Bulletin of the Metropolitan Museum of Art*, New York, January 1943, p. 176.
30. C. Lamm, *Glass from Iran*, pls. 9; 11–12; 14 F, G, K; 15.
31. *ibid.* pls. 14, a-d; 23; 25, c; 26, c, etc.
32. C. Lamm, *M.G.*, i, pp. 58–9; ii, pl. 13.; three metal dip-moulds with internal patterning have in recent years passed through Sotheby's, on 15 October 1985, lot 44 and on 16 April 1986, lot 33: the latter has an inscription read as ''Uthmān ibn Abū Naṣr al-Zajjāj', interpreted as 'the glassmaker'.
33. C. Lamm, *Glass from Iran*, pls. 8, I; 29.; cf. B. Rackham, '*A* Glass Beaker from Persia in the Victoria and Albert Museum', *Artibus Asiae* iv, 1925, pp. 307ff.
34. Arthur Lane, 'Medieval Finds at Al Mina in North Syria', *Archaeologia* lxxxvii, 1938, pp. 69–70, fig. 11.
35. C. Lamm, *M.G.*, i, p. 64; ii, pls. 15, 16.
36. C. Lamm, *Glass from Iran*, pl. 28.
37. *ibid.*, pls. 40–3.
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Jacket illustrations:

Front: detail of 'Polonaise' carpet, Colnaghi, London (see plate 25, chapter 8).
Back: Ewer, brass in laid with silver and copper, British Museum (see plate 14, chapter 10).

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